Work Sample: Instructional Design

by Hector Solano

About this document's structure: it contains 4 sections subdivided in a total of 18 sequential subsections.

Contents

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Work Sample Overview

This document includes samples from the instructional design specifications of a learning project (IDD learning project) that was part of a program I designed, developed, and delivered from 2021 to 2023 (Objective-Drive Content Development).

The document is divided into 4 sections and 18 sequential subsections.

The design is:

- Learner-centric
- Objective-driven, and
- Evaluation-focused

For confidentiality reasons, changes were made to sensitive information such as names of teams, metrics, and procedures.

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Section 1: Needs Assessment Summary

1. Organizational outcomes

Find the outcome information highlighted in yellow below. The core information of each subheading is underlined.

1.1 Training Need: organizational background (Problem description)

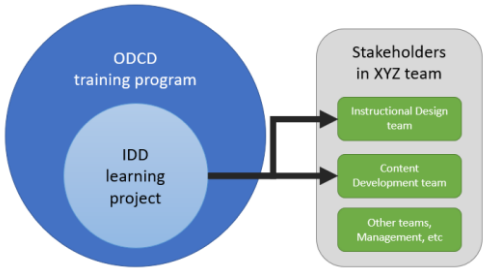
The XYZ[1] team is part of a larger business unit within the company. As such, XYZ creates learning experiences for external customers. The Content Developers and Instructional Designers in the XYZ team are product SMEs or trainers that were promoted, so they have little-to-no pedagogy knowledge. This knowledge gap (lack of Instructional Design practices) negatively impacts the time to market of XYZ's learning solution requests because of the following issues:

a) Content planning uncertainty,
b) Topic sequencing issues,
c) Long approval review cycles aiming to fix inconsistencies generated by a) and b)
d) Content development delays,
e) Lack of stakeholder visibility over learning solution progress status,
f) Workload planning inaccuracy, and
g) Scope creep related to the difficulty to consistently meet requestor expectations and deadlines

1.2 The learning solution

The "Objective-Driven Content Development" training program (ODCD) intends to bridge the knowledge and skills gaps to solve the issues above by introducing a series of Instructional Design practices and systems within XYZ. For this work sample, I will present evidence of a project that was part of the ODCD program, called "Interactive Design Document (IDD) learning project".

The IDD is a new tool. It consists of a web-based learning design environment I developed in MsPowerApps, which stores learning objectives and content planning information in a centralized database for the XYZ team. The IDD learning project introduces new users to IDD. This work sample shows a segment of the IDD learning project that is focused on two counterpart user roles: Instructional Designer and Content Developer.



1.3 Organizational outcomes

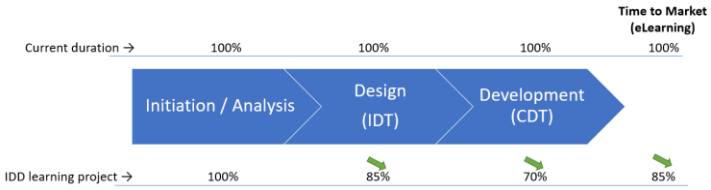
The IDD learning program looks to improve two metrics:

- "Content Development Time" (CDT)[2], for the Content Development team within XYZ,
- "Instructional Design Time" (IDT)[2], for the Instr.Design team within XYZ

And, by extension, these impact a third metric:

- "Time to Market" (TTM)[2] for the XYZ team in the segment of eLearning delivery

Through the IDD learning project, my aim was to reduce CDT by 30% per project, as well as IDT by 15% per project. This is roughly the same as reducing XYZ's team TTM by 15% on the segment of eLearning deliverables.



[1] For confidentiality reasons, I will use fake names to reference the structure of my company, including team names such as XYZ.

[2] For confidentiality reasons, these are fake names of metrics.

1.4 Business impact

Improving TTM directly benefited the adoption of IT products paid for by the company's customers. This is how the IDD learning program impacted the strategic business goals of the company.

1.5 Organizational impact

Given that IDD was a centralized source of learning planning information, the IDD learning project held the potential to increase a wide array of efficiencies in the XYZ team, within and beyond the teams of Content Development and Instructional Design. For content developers and instructional designers, this meant easier communication and a faster flow of work.

1.6 Organizational Impact: Best case scenario

Through the learning solution, I aimed at:

1. Decreasing the number of review cycles for content approval to 50% less review meetings per eLearning lesson, and
2. Decrease the number of meetings required to reach viable learning solution prototypes

As a result of this, the learning project could potentially save the XYZ team dozens of work hours per month (possibly hundreds), thus increasing the productivity and reactivity of the whole XYZ team.

2. Learners' on-the-job performance requirements

This section describes how I linked the OTJ performance requirements to organizational outcomes and training needs.

Find the performance requirement underlined, and the training need highlighted in green

Two roles benefited from the IDD learning project:

Role	Job tasks for each learning lesson	Performance Requirement
Instructional Designer	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Meet with content developer to align regarding the learning sequence and other content details of the lesson 5. Update IDD according to changes generated during meetings with the Content Developer 6. Document their duration times	Design work should be completed in approx. 85% of the current IDT  This is possible thanks to the efficiencies created by IDD, as taught by the IDD learning program, which fills the knowledge gap described in question#1 (lack of instr. Design. knowledge)
Convent Developer	1. Use the IDD as a source for developing content for the lesson 2. Use the IDD as a source of suggested evaluation items for the lesson 3. Meet with Instructional Designer to consult on the content and evaluation of the lesson 4. Document their duration times	Development work should be completed in approx. 70% of the current CDT  This is possible thanks to the efficiencies created by IDD, as taught by the IDD learning program, which fills the knowledge gap described in question#1 (lack of instr. Design. knowledge)

3. Needs assessment data-collection process

3.1 Interviews

As part of the ODCD training program, I interviewed and consulted with each member in the content development team (including managers) to identify their knowledge gaps in terms of instructional design knowledge. The interviews always revolved around a specific deliverable the content developer was working on. I used these interviews with a triple purpose in mind:

1. Help developers improve the content of their current deliverable.
2. Identify the developers' level of knowledge regarding the correct use of learning objectives.
3. Measure the retention and on-the-job usage of the knowledge taught in the ODCD group training sessions with the purpose of deciding how to enrich the ODCD program going forward.

3.2 The questions

These are the questions for the interviews/coaching sessions:

- What is the learner able to do after completing this lesson? In other words, what are the objectives?
- How do you break the objectives down into sections?
- Does the sequence of sections make sense? Are there gaps between them?
- Is each section related to a specific learning objective?
- How is each objective in the lesson reflected in the skill check items?
- Is the skill check item allowing the learner to confirm that they have met the learning objective?
- Is the action in the objective reflected in the skill check item?

Using their answers to these questions, the session focused on how to fix the content deliverable at hand. I documented the feedback for both the developer and me.

After a few interviews, I used the feedback documents to make decisions about the ODCD training program.

4. Learning modality

The modality consisted of SAM iterations (Successive Approximation Model) in a blended modality combining virtual-instructor-led sessions with job-aids and 1on1 coaching. The table below provides the details. Note that objective 2 for each session focuses on how each learner profile is to collaborate with their counterpart

Learning Approach	Details

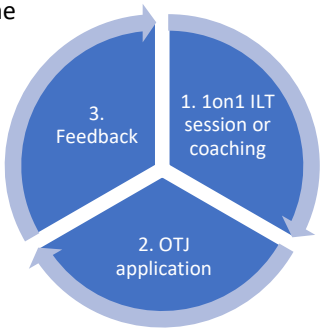
Formal	Two virtual Instructor-led sessions with a similar structure:
	
	Structure: welcome, housekeeping rules, objectives of the session, icebreaker, overview of IDD tool, overview of roles (instr. desgnr and content developer), Job tasks demonstration (as specified in subsection #2 of this document), practice with IDD tool, self-evaluation method for the learner to determine if they are using IDD properly, job aids overview, next steps (iterative road map as specified in "Subsection #5" of this document: OTJ application and self-paced learning, feedback meeting, and 1on1 coaching), Q&A, session end.
	
	Estimated duration: 90 minutes with one 5min. break after "practice with IDD tool".
	
	Session A
	• Audience: Instructional designer
	• Objectives:
	  • Given a learning request sheet, the learner will plan one lesson that includes at least four enabling objectives in a sequence of increasing complexity that remains on topic, and it includes fact, procedure, and evaluation information for at least 90% of the enabling objectives.
	  • Given a fully documented IDD lesson plan and a content development storyboard, the learner will reach alignment with the content developer regarding how the IDD lesson plan will be reflected in the first version of the lesson, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.
	
	Session B
	• Audience: Content developer
	• Objectives:
	  • Given a lesson plan in the IDD tool, the learner will generate a content development storyboard that follows the outline set by the enabling objectives in the IDD lesson plan, including 100% of the information and the sequence laid out in said plan.
	  • Given a fully documented IDD lesson plan and a content development storyboard, the learner will reach alignment with the instructional designer regarding how their first version of the lesson will reflect the IDD lesson plan, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.

Informal	There are two informal elements:
	• **Job-aids**: each learner profile (instructional designer and content developer) will get their own 1-pager job aid. Also, I have added a layer of help screens and tooltips within the IDD tool so users can find information when they need it (just-in-time approach)
	• **Unstructured 1on1 coaching.** I will provide 1on1 coaching to ensure learners are:
	  • Using the IDD tool as intended
	  • Abiding by the procedure taught in the ILT session
	Section 5 of this document (found below) explains the iteration cycle of 1on1s, OTJ, and feedback.

5. Modality justification

This section includes the justification for the selected modality and how the needs assessment results informed this decision.

Based on previous needs assessment interviews for ODCD, and on the recommendation of my line manager, I defined the optimal method to implement the IDD learning project: an iterative process (based on SAM) that included the ILT session, OTJ application, and a feedback phase. From the second iteration onward, and depending on the result of the feedback phase, the first part of the cycle could be either 1on1 coaching or another ILT session.



The needs assessment informed this because the interviews revealed that each learner had have a different baseline knowledge, and a different interpretation of how to apply instructional design concepts in their daily jobs. Therefore, each team member required a customized approach for teaching them new procedures.

5.1 ILT session

I selected one learning solution request that my team was going to work. Then, I scheduled a 1on1 ILT session with the assigned Instructional Designer, and later with the Content Developer. During this session, the purpose was to teach each of them to use the IDD for two purposes (as specified in the table below): 1. Completing their job tasks, and 2. collaborating with their counterpart.

Role	Job tasks for each lesson
Instructional Designer	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Meet with Content Developer to align regarding the learning sequence and other content details of the lesson 5. Update IDD according to changes generated during meetings with the Content Developer 6. Document their duration times
Convent Developer	1. Use the IDD as a source for developing content for the lesson 2. Use the IDD as a source of suggested evaluation items for the lesson 3. Meet with Instructional Designer to consult on the content and evaluation of the lesson 4. Document their duration times

After the session, I set a reminder to send both designer and developer an email asking them how they felt with the new procedure working in the IDD.

5.2 OTJ application

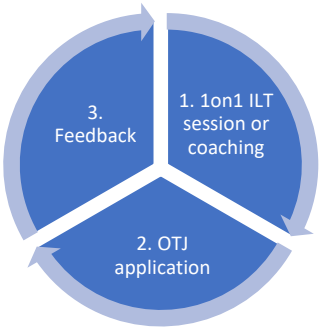
After the ILT session, the designer and the developer would do their jobs as instructed. I provided them with a one-pager job-aid so they could try things on their own. I also included help screens and tooltips in the IDD tool for learners to perform OTJ self-paced reviewing of the ILT content.

5.3 Feedback phase

During this phase, the learners received feedback that helped them determine whether their performance was up to expectation. This feedback originated from: the observable result of their activity within the IDD tool, and the judgement provided by me, as a trainer, Instr. Design coach, and IDD tool developer.

The feedback phase started within 10 days after the ILT session, and it was triggered by either of these events:

1. 10 days after the session. The reminder triggers (the one I set after the ILT session). Then, I sent the learners an email asking them what they thought of their performance within the IDD tool and how it had helped their workflow.
2. Before the 10 days went by, the learners contacted me to ask questions



At this point, the cycle started again with another (more nuanced) ILT session (formal) or coaching session (informal) with the designer or the developer (or both). After a couple of cycles, the learners were ready to champion the new process and promote it among their peers.

By this stage, I started a new wave of trainees.

Section 2: Learning Objectives, Outline, and Visual Representation

6. Learning objectives (terminal)

This section provides examples of terminal objectives, i.e. the overarching objectives for each learning event.

Learning event	Learning objective (Terminal)
ILT Sessions for Instructional Designers	Given a learning request sheet, the learner will plan one lesson that includes at least four enabling objectives in a sequence of increasing complexity that remains on topic, and it includes fact, procedure, and evaluation information for at least 90% of the enabling objectives. Given a fully documented IDD lesson plan and a content development storyboard, the learner will reach alignment with the content developer regarding how the IDD lesson plan will be reflected in the first version of the lesson, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.
ILT Sessions for Content Developer	Given a lesson plan in the IDD tool, the learner will generate a content development storyboard that follows the outline set by the enabling objectives in the IDD lesson plan, including 100% of the information and the sequence laid out in said plan. Given a fully documented IDD lesson plan and a content development storyboard, the learner will reach alignment with the instructional designer regarding how their first version of the lesson will reflect the IDD lesson plan, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.
On-The-Job performance coaching	Given the performance feedback documented during the IDD tool performance shadowing session, the learner will improve their performance within the IDD tool until their actions abide 100% by the steps described in the user manual and the procedure taught in the ILT session.

7. Content outline

This section is a content outline that includes time allocations within a session to demonstrate sufficient practice time for knowledge/skill acquisition to meet the learning objective(s).

7.1. Content Outline Summary

This is a sample outline for half of the sessions.

Course: IDD Tool Learning Project

Module: VILT sessions for Instructional Designers

Sessions: A1 and A2, as part of the blended learning design drafted in the section *Subsection #4* of this document. Originally, I envisioned session A as a single session. However, after taking a closer look at the task analysis, I concluded that the topics required two sessions: A1 and A2, one for each of the terminal objectives specified below.

Session Titles:

- Session A1: eLearning design – lesson drafting with the IDD tool
- Session A2: eLearning design – lesson handover to content development team

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Terminal Objectives:

Session A1

At the end of this session, and given a learning request sheet, the learner will **plan one lesson** that includes at least four enabling objectives in a sequence of increasing complexity that remains on topic, and it includes fact, procedure, and evaluation information for at least 90% of the enabling objectives.

Session A2

At the end of this session, and Given a fully documented IDD lesson plan and a content development storyboard, the learner will **reach alignment with the content developer** regarding how the IDD lesson plan will be reflected in the first version of the lesson, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.

Agenda:

The following structure applies to both sessions A1 and A2. The only difference being the Presentation section, with the job tasks distributed according to the terminal objective of each session.

1. Introduction
   - Welcome
   - Housekeeping rules: participant guide, media/materials that will be used throughout the session, IDD Tool access overview, MsTeams screenshare with "Request Control" active.
   - Session objectives
   - Icebreaker
2. Review
   - Overview of existing process
3. Overview
   - IDD tool benefits
   - IDD tool: UI summary
   - IDD user roles (Instr. Designer and content developer)
4. Presentation
   - Demonstration: job tasks (as specified in section 2 of this document, image attached below)
   - Each of the 6 tasks is broken down into its own set of steps and presented during each of these sessions:
     - Session A1 covers job tasks 1, 2, 3, and 6
     - Session A2 covers job tasks 4, 5, and 6

Role	Job tasks for each lesson	Performance Requirement
Instructional Designer	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Meet with content developer to align regarding the learning sequence and other content details of the lesson 5. Update IDD according to changes generated during meetings with the Content Developer 6. Document their duration times	Design work should be completed in approx. 85% of the current IDT Design (IDT) 85% This is possible thanks to the efficiencies created by IDD, as taught by the IDD learning program, which fills the knowledge gap described in question#1 (lack of instr. Design. knowledge)

5. Exercise
   - Practice with the IDD tool
6. Summary
   - Self-evaluation method for learners to determine if they are using IDD properly
   - Job aids overview
7. Closing
   - Next steps of the learning experience: OTJ application, feedback, coaching
   - Q&A

7.2 Outlines

The outlines below correspond to each of the already mentioned terminal objectives. For the sake of simplicity, the Objective column only includes the core action statement from each objective. Refer to the heading *Terminal Objectives* to see each learning objective statement.

7.2.1 Outline, Session A1

Estimated effective duration: 69 minutes.

- Introduction: 10 min
- ROPES: 49 min
- Closing: 10 min

Total duration: 90 minutes, including two 10-minute breaks after the Presentation and the Exercise stages.

ROPES summary

Objective	Stage	Topic	Learning Method	Materials/Media	Estimated Time
Plan one lesson	Review	Overview of existing process	Discussion	• Current Design Document (Excel format) • Example of a lesson design draft within the current Design Document	5 min.
	Overview	IDD tool benefits for planning a lesson (WIIFM)	Presentation	• PowerPoint slides	2 min.
		IDD tool UI summary: lesson planning screens	Demonstration	• PowerPoint slides • IDD Tool	3 min.
		IDD user roles	Presentation	• PowerPoint slides	3 min.
	Presentation	Demonstration: Job tasks 1, 2, 3, and 6	Summary of steps Demonstration	One cycle per job task, except for #6*: • Flow Chart outlining task steps • IDD Tool *Task #6 is the final step of each task.	2 min./cycle Total: 6 min
	Exercise	Practice with the IDD tool: Job tasks 1, 2, 3, and 6* *Task #6 is the final step of each task.	Hands-on practice (Job task procedure) Discussion Coaching/Shadowing	• MsTeams Screen share with "Request Control" active • IDD Tool	7 min. per job task Total: 21 min.
	Summary	Self-evaluation method and Job aids overview: Job tasks 1, 2, 3, and 6* *Task #6 is the final step of each task.	Presentation Hands-on practice (self–evaluation) Discussion Coaching/Shadowing	• PowerPoint slides with procedure summary • Job aid	3 min. per job task Total: 9 min.

7.2.2 Outline, Session A2

Estimated effective duration: 58 minutes.

- Introduction: 10 min
- ROPES: 38 min
- Closing: 10 min

Total duration: 60 minutes, including two 10-minute breaks after the Presentation and the Exercise stages.

ROPES summary

Objective	Stage	Topic	Learning Method	Materials/Media	Estimated Time
Reach alignment with the content developer	Review	Overview of existing process	Discussion	• Current Design Document (Excel format) • Current resources: Storyboard document, and Storyline template	10 min.
	Overview	IDD tool benefits for handing over a lesson to the content development team (WIIFM)	Presentation	• PowerPoint slides	2 min.
		IDD tool UI summary: lesson handover screens	Demonstration	• PowerPoint slides • IDD Tool	2 min.
	Presentation	Demonstration: Job tasks 4, 5, and 6	Summary of steps Demonstration	One cycle per job task, except for #6*: • Flow Chart outlining task steps • IDD Tool *Task #6 is the final step of each task.	2 min./cycle Total: 4 min
	Exercise	Practice with the IDD tool: Job tasks 4, 5, and 6* *Task #6 is the final step of each task.	Hands-on practice (Job-task procedure) Discussion Teach back Coaching/Shadowing	• MsTeams Screen share with "Request Control" active • IDD Tool	7 min. per job task Total: 14 min.
	Summary	Self-evaluation method and Job aids overview: Job tasks 4, 5, and 6* *Task #6 is the final step of each task.	Presentation Hands-on practice (Self-evaluation) Discussion Coaching/Shadowing	• PowerPoint slides with procedure summary • Job aid	3 min. per job task Total: 6 min.

8. Learning methods justification

This section demonstrates how the selected learning methods for this learning design addressed adult learning principles and interactive learning techniques to cause the learning to happen.

The content outline in subsection #7 includes the following learning methods:

Learning Method	What's the **Adult learning Principle?**	Does it include an **Interactive learning Technique**?
General time allocation for each learning method	Medina's cognitive process model: no single topic in the ROPES summary takes longer than 10 minutes. This constant changing is aimed at keeping the learner engaged and at reducing their mental fatigue. Also, the breaks scheduled after the Presentation and the Exercise states allow the brain some resting time before continuing with a higher complexity mental task.	N/A
Discussion (during the Review stage of ROPES)	Gagné's Event 3: activation of prior knowledge by asking the learner to describe the current procedure. Bloom's Taxonomy: High order thinking (Analysis and Evaluation). After describing the current process, the learner is prompted to name a few pain points or improvement areas, which triggers cognitive processes related to the Analysis and Evaluation levels. At the same time, this serves as a transition into the WIIFM part of the session. Kirkpatrick level 1: after the introduction of the session, and during the discussion, the facilitator is to gauge the learner´s reaction to ensure their mindset is appropriate to start the presentation of benefits. Cognitive load: the discussion is kept short and focused to keep cognitive load under control. For the same reason, no new information will be introduced during the Review Discussion. Design thinking: starting the session with a discussion creates a human-centered approach where the facilitator is getting the perspective from the learner and refining the problem at the same time. This information can lead to insights on how to improve the session or the teaching approach in future iterations.	Yes. Discussions are interactive by nature. The facilitator should let the learner express their opinion and take note of it, only intervening to moderate the learner back into high order thinking.
Discussion (During the Exercise and Summary stages of ROPES)	Bloom's Taxonomy: High order thinking (Analysis and Evaluation). The learner will be prompted to not only apply knowledge, but also analyze and evaluate their own performance through the self-evaluation method and the job aid. Gagne's event #9: the self-evaluation and job aid are aimed at promoting and optimizing transfer to the job. The exercise itself is a real example of an existing project, therefore eliciting real-world application. Kirkpatrick level 2: discussion during the hands-on segments is aimed at assessing that the learner is indeed acquiring the intended skills	Yes (same as above)
Presentation	This is a regular PowerPoint presentation. Cognitive Load: reducing extraneous cognitive load via proper text layout and graphic design methods, as well as chunking and sequencing the information to optimize intrinsic and germane cognitive loads.	No

Summary of steps	Bloom's Taxonomy level 2 (Understand): presenting a summary allows for a gradual increase in complexity by introducing the general concept of each step within the job task at hand. This is the foundation for higher level cognitive tasks that are coming later in the session.	No
Demonstration	Cognitive load (Germane): the purpose of the demonstration is to help learners build a mental schema of the general steps and the location of the related functions within the IDD tool. Showing the link between the procedure steps and the demonstration reduces germane cognitive load. This is also consistent with Gagne's event #5	No. Learners will be instructed to pay attention to each demonstration. These demonstrations are high level and their purpose is to convey the general sequence of steps and where it is performed within the IDD tool.
Hands-on practice (Job task procedure)	Bloom's Taxonomy level 3, application. This is an intuitive increment in cognitive complexity. After having understood the job task steps during the demonstration, the learner will get to try it for themselves. This is also consistent with Gagné's event #6	Yes. The learner will have to access the IDD tool and perform each step of each job task. The system provides live and immediate feedback to the learner's actions, therefore generating an assessment of the learner's procedure abidance.
Hands-on practice (Self-evaluation)	Bloom's Taxonomy levels 4 and 5 (evaluation and analysis). The learner practices how to determine their performance quality when using the IDD tool. The job aid provides a specific procedure to do so. This is also consistent with Gagne's event #8.	
Coaching/Shadowing	Coaching/Shadowing is consistent with Gagne's event #7: The use of a shared screen enabling the *Request Control* feature allows for the facilitator to let the learner take perform the procedure as they have just learned it. Ideally, the facilitator only watches and nudges the learner if/when necessary. This is the Coaching experience. In case the learner gets stuck beyond the time limit, the facilitator can use the *RequestControl* feature to take over and perform some of the steps to help the learner progress. This is the Shadowing experience.	Yes. The facilitator provides live feedback so the user can improve their performance to meet the session's objective
Teach back	This is a kind of discussion where the learner teaches what they just learned back to the facilitator. It works as an assessment of Bloom's level 3 (application) as learners explain how to perform job tasks.	Yes.

9. Delivery description

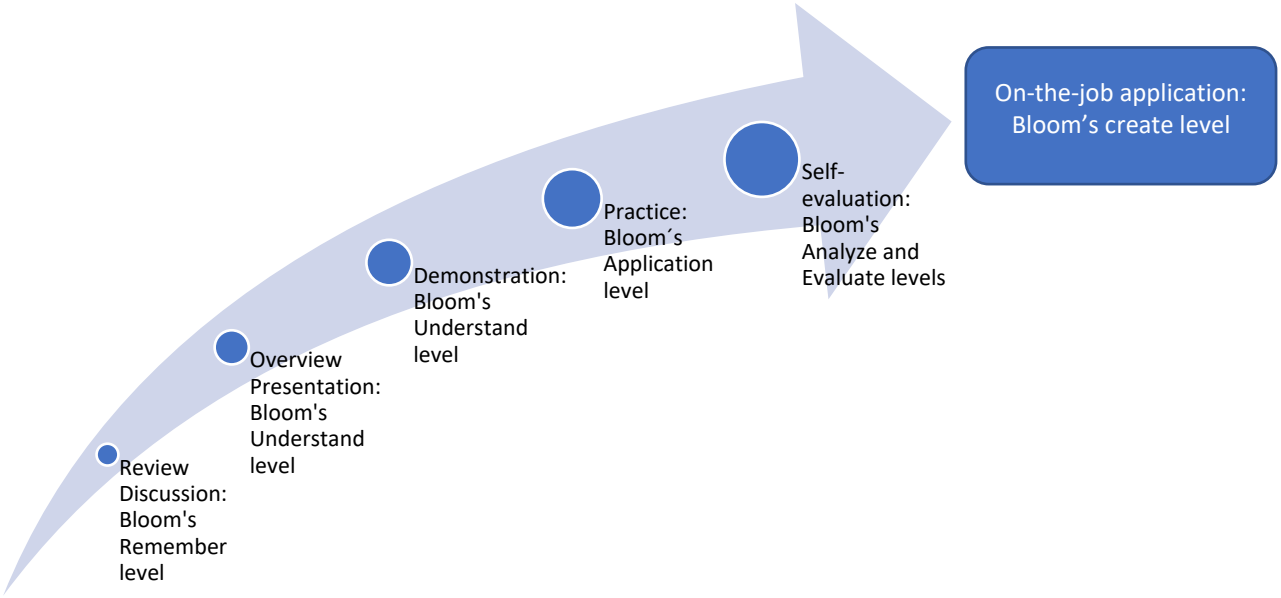
Both sessions A1 and A2 were delivered through Virtual Classroom. The materials/media included:

- Current procedures and resources, which help recreate a real work environment (design documentation in Excel format, storyboarding document/template and Storyline template)
- PowerPoint deck for the session's presentation, which includes both the steps and the knowledge related to each job task.
- Participant guide to follow along the session
- IDD tool's skilling environment for learners to practice inside the real tool
- Job aid for on-the-job application and reinforcement

10. Learning methods justification

This section explains my rationale for including the selected learning methods and delivery options.

My main purpose was to create a human-centered experience where the session's design was dictated by the needs and motivations of the learner. Based on Bloom's taxonomy, the learning methods provide a gradual increase from low-order to high-order cognition, which looks like this:



To increase the likelihood that the learner would be able to transfer the session's skills to the job, I applied Action Mapping to work my way back from the key behavior that impacts the business outcome to the learning session information that guaranteed the behavioral change was achieved. Such key behavior was the proper use of the IDD tool to promote alignment between instructional designers and content developers. This behavior required high-order thinking (create lesson designs), which means that it was necessary for the learning experience to build a gradual progression from Bloom's level 1 to level 6. And so, I defined learning methods to promote each specific cognitive task, by asking questions in reversed order from Bloom's high level to low level:

Question number	Question	Bloom's level	Answer	Design decision: learning method selection
1	How can the learners transfer the learnt skill to the job? How can learners create lesson designs?	6. Create	By adjusting a procedure to their specific on-the-job context	Repeated practice, self-evaluation, and feedback allow the learner to develop high-order thinking and transfer their skills to the job.
2	How do learners know they performed properly?	5 and 4 Evaluate and Analyze	By applying a specific self-assessment procedure By obtaining facilitator feedback By observing the resulting state of the IDD tool	Coaching/Shadowing Job aid Feedback discussions

3	How do learners perform the job task?	3. Apply	By following the specific steps for each job task	Hands-on practice of each job-task procedure Discussion about the procedure Teach back the procedure
4	What information do learners need to understand not only the how but the why behind the job task's procedure steps?	2. Understand	By being exposed to information about the benefits and purpose of the IDD tool By getting familiar with the general steps from a high-level perspective	Presentation Demonstration summary of procedure steps
5	What information does the learner need to know about the value of the IDD tool?	1. Remember	By activating their existing knowledge about current procedures and the related pain points	Discussion of current procedures and resources

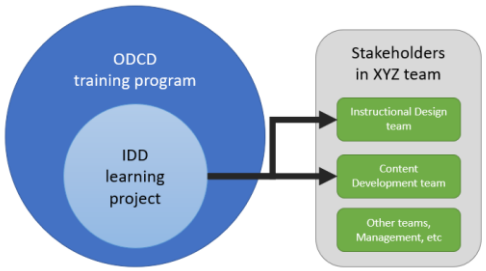
Section 3: Sample Content

11. Descriptions of activities

This section outlines specific descriptions of two different activities (VILT sessions). Two overview sections preceed the activity descriptions: the project overview and the general description of both activities.

11.1 Learning project overview

These activities were based on the Content Outline found in subsection #7 of this document.



- Context within the IDD learning project: These activities were part of the VILT Sessions aimed at Instructional Designers and Instructional Developers. This subsection of the document focuses on the activities for VILT Sessions A1 and A2 (as described in the Content Outline)*

Role	VILT Session	Related Job tasks
Instructional Designer	A1	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Document their duration times
	A2	5. Meet with content developer to align regarding the learning sequence and other content details of the lesson 6. Update IDD according to changes generated during meetings with the Content Developer 7. Document their duration times
Convent Developer	B1	1. Use the IDD as a source for developing content for the lesson 2. Use the IDD as a source of suggested evaluation items for the lesson 3. Document their duration times
	B2	4. Meet with Instructional Designer to consult on the content and evaluation of the lesson 5. Document their duration times

*The Content Outline in subsection #7 includes one task less in sessions A1 and B1. The improved version found in the table above includes an extra step for A1 and B1 where the learner documents their duration time.

- Overview of the VILT activities: In sessions A1 and B1, each role learned their part. In sessions A2 and B2, each role learned to interact with their counterpart. During the activities for the A2 and B2 sessions, the facilitator played the role of the counterpart. Here is the focus of the activity section in each session:
  - Session A1: Instructional Designer learned how to use the IDD tool
  - Session A2: Instructional Designer learned how to use the IDD tool before/during the alignment meeting with Content Development (facilitator played the role of Content Developer)
  - Session B1: Content Developer learned how to use the IDD tool
  - Session B2: Content Developer learned how to use the IDD tool before/during the alignment meeting with Instructional Design (facilitator played the role of Instructional Designer)

11.2 General description of the activities

- Description: This subsection of the document focuses on Sessions A1 and A2. Learners in the Instructional Designer group practiced with the IDD tool in a skilling environment under two scenarios:
  - Session A1: Loading eLearning plan for one lesson in the IDD tool
  - Session A2: Using IDD tool before/during the meeting with the Content Developer counterpart
- When the activities took place: Halfway through VILT sessions A1 and A2

- Prerequisite: By the halfway point of each VILT session, learners had:
  - Familiarized themselves with IDD tool fundamentals (benefits, UI overview, user roles, and basic functionality)
  - Seen the IDD tool in action through a live demonstration from the facilitator
- Business Impact focus (Job Task context): The table below specifies how the activities related to a specific performance requirement (reduce IDT to 85%)
  - Activity#1 was planned for VILT Session A1, and it covered job tasks 1, 2, 3, and 4
  - Activity#2 was planned for VILT Session A2, and it covered job tasks 5, 6, and 7

Role	VILT Session	Related Job tasks	Performance Requirement
Instructional Designer	A1	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Document their duration times	Design work should be completed in approx. 85% of the current IDT 
	A2	5. Meet with content developer to align regarding the learning sequence and other content details of the lesson 6. Update IDD according to changes generated during meetings with the Content Developer 7. Document their duration times	This is possible thanks to the efficiencies created by IDD, as taught by the IDD learning program, which fills the knowledge gap described in question#1 (lack of instr. Design. knowledge)

11.3 Activity #1

Learning Event	VILT Session A1
Name	Loading eLearning plan in the IDD tool for one lesson
Audience	Instructional Designers
Class Size	Depending on business needs: • One learner per VILT session for optimal delivery/evaluation and duration time of the session (recommended) • Up to 3 learners per VILT session for optimal team discussion, but it may take up to 10 extra minutes per job task to complete this session, for a total of 30 extra minutes on top of the proposed time of 21 minutes. From this point onward, let´s use the recommended class size.
Learning Objective	Given a learning request sheet, the learner will plan one lesson that includes at least four enabling objectives in a sequence of increasing complexity that remains on topic, and it includes fact, procedure, and evaluation information for at least 90% of the enabling objectives.
Prerequisites	The learner must: • Be familiar with the IDD tool • Have seen the IDD tool in action through a demonstration
Related Job Tasks	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Document duration times* *Job task #4 is the final step of each task
Activity type and Scenario	This is an application activity based on the following scenario:

	The instructional designer has received the learning request documentation, and now they must enter this information into the IDD tool with the purpose of creating a lesson plan for the content developer. The lesson plan should be specific enough for the content developer to generate a storyboard.
Description	To complete the exercise successfully, the learner should: 1. Log into the IDD system 2. Extract information from the learning request sheet and document it in the appropriate sections of the IDD tool, including: a. Four enabling objectives in their respective sequential order b. The respective facts and procedures for each enabling objective c. At least 3 evaluation recommendations (one per objective) 3. Review the Job aid as they use the IDD tool to ensure they are properly using each section of the tool 4. Present their results to the facilitator 5. Discuss their experience
Setup required	1. Setting up the skilling environment of the IDD tool 2. Creating the Job Aid 3. Preparing the learning request sheet 4. Doing a test-run to ensure the job-aid and the learning request sheet include all the necessary details for the learner to complete the exercise successfully 5. Prepare a set of interview questions for the post-exercise discussion
How to run it Approx. time: 30-35 mins.	1. Provide the learner with the following materials: a. User access to the IDD tool (skilling environment) b. The job-aid c. A learning request sheet including the details about the eLearning lesson they must document within the IDD tool 2. Allow the learner 3 minutes to read the materials and ask questions 3. Request the learner to start sharing their screen and begin the exercise 4. Control for time: each job task should be completed in approximately 7 minutes, for a total of 21 minutes 5. At the 20 minutes mark, declare “5 minutes left” and provide the necessary guidance for the learner to finish at least one instance of each job task. 6. At the 25 minutes mark, declare time is over 7. Discussion time: ask the questions in the post-exercise interview (5 mins) a. Document the learner’s responses. b. Provide improvement feedback to the learner on how to better leverage the Job-aid to meet the learning objective of the lesson 8. Finish the activity with some closing comments 9. Transition to the session’s agenda (ROPES Summary as specified in the Outline section of this document)
How to debrief it	After the session, review the facilitator’s notes from the discussion in step 7 above, and from the Summary stage of the ROPES breakdown table. • Was the learner able to meet the learning objective of the session? • Was there enough time for the learner to complete each job task at least once? • Where in the procedure did the learner perform as expected, and where did they have issues? • Summarize the insights from the discussions in the E and the S stages of the ROPES design. • How can the O and the P stages of the ROPES design be improved based on this information?

	Brainstorm on how to improve the activity and the session overall, based on the facilitator's notes.

11.4 Activity #2

Learning Event	VILT Session A2
Name	Using IDD tool to document meeting with Content Developer counterpart
Audience	Instructional Designers
Class Size	Depending on business needs: • One learner per VILT session for optimal delivery/evaluation and duration time of the session (recommended) • Up to 3 learners per VILT session for optimal team discussion, but it may take up to 10 extra minutes per job task to complete this session, for a total of 20 extra minutes on top of the proposed time of 14 minutes. From this point onward, let´s use the recommended class size.
Learning Objective	Given a fully documented IDD lesson plan and a content development storyboard, the learner will reach alignment with the content developer regarding how the IDD lesson plan will be reflected in the first version of the lesson, including 100% of the factual and procedural information, and at least 50% of the evaluation and learning sequence details.
Prerequisites	The learner must: • Be familiar with the IDD tool • Have seen the IDD tool in action through a demonstration
Related Job Tasks (tasks 1 – 4 were practiced during session A1)	5. Meet with content developer to align regarding the learning sequence and other content details of the lesson 6. Update IDD according to changes generated during meetings with the Content Developer 7. Document duration times* *Job task #7 is the final step of each task
Activity type and Scenario	This is a role-play activity based on the following scenario: *The facilitator takes the role of a content developer, who created a storyboard that mostly matches the IDD lesson plan, but it deviates from it by:* • *Introducing a new section of content* • *Placing such section in a position that breaks the learning sequence of the IDD lesson plan*
Description	To complete the exercise successfully, the learner should: 1. Log into the IDD system 2. Compare the IDD lesson plan and the content development storyboard to identify if they match. 3. Have a discussion with the person roleplaying as the content developer. The idea is to obtain alignment with the content developer, including: a. Discussing the correlation between the IDD lesson plan and the storyboard. If the storyboard doesn't match, the learner should raise the flag and discuss it with the content developer to understand the root purpose of such changes. b. Determining whether the new content proposed by the content developer matches the scope of the lesson plan and negotiate the possibility of either: i. Including the new content and update the lesson plan ii. Moving the new content to another lesson iii. Removing the new content altogether

	4. Update the IDD lesson plan accordingly. 5. Present their results to the facilitator 6. Discuss their experience
Setup required	1. Setting up the skilling environment of the IDD tool 2. Preparing an example of a documented lesson plan in the IDD tool 3. Preparing the corresponding content development storyboard 4. Doing a test-run to ensure the IDD lesson plan and the storyboard include all the necessary details for the learner to complete the exercise successfully 5. Prepare a set of interview questions for the post-exercise discussion
How to run it Approx. time: 20-25 mins	1. Provide the learner with the following materials: a. User access to the IDD tool (skilling environment) b. Access to the lesson plan within the IDD tool c. The content development storyboard 2. Allow the learner 5 minutes to read the materials and ask questions about the exercise. 3. Request the learner to start sharing their screen and begin the exercise 4. Control for time: each job task should be completed in approximately 7 minutes, for a total of 14 minutes 5. At the 10 minutes mark, declare "4 minutes left" and provide the necessary guidance for the learner to finish at least one instance of each job task. 6. At the 14 minutes mark, declare time is over 7. Discussion time: ask the questions in the post-exercise interview (5 mins) a. Document the learner's responses. b. Provide improvement feedback to the learner on how to better leverage the Job-aid to meet the learning objective of the lesson 8. Finish the activity with some closing comments Transition to the session's agenda (ROPES Summary as specified in the Outline section of this document)
How to debrief it	After the session, review the facilitator's notes from the discussion in step 7 above, and from the Summary stage of the ROPES breakdown table. • Was the learner able to meet the learning objective of the session? • Was there enough time for the learner to complete each job task at least once? • Where in the procedure did the learner perform as expected, and where did they have issues? • Summarize the insights from the discussions in the E and the S stages of the ROPES design. • How can the O and the P stages of the ROPES design be improved based on this information? Brainstorm on how to improve the activity and the session overall, based on the facilitator's notes.

12. Samples of learning materials

I have chosen three samples out of the full set of materials from the project.

12.1 Sample 1: Formal Learning

PowerPoint presentation for Session A1 (compliant with branding guidelines).

Below is a set of sample screenshots from the slides deck:

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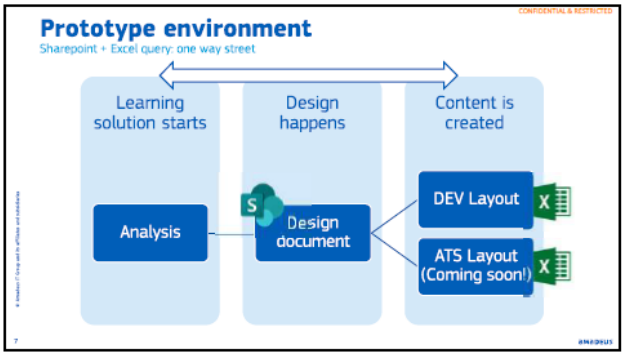

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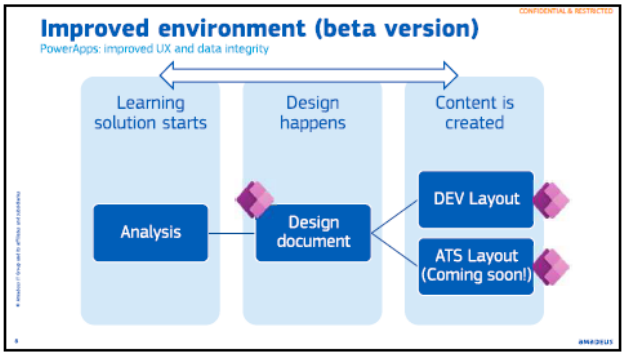

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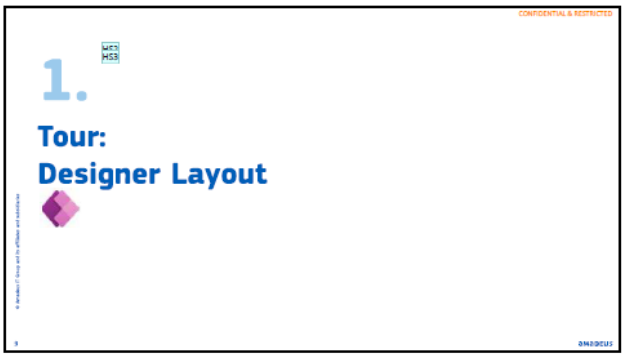

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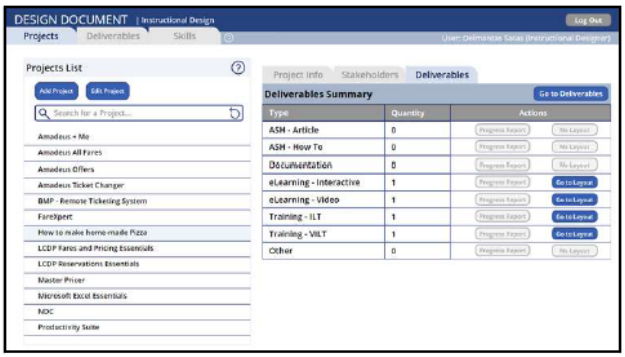

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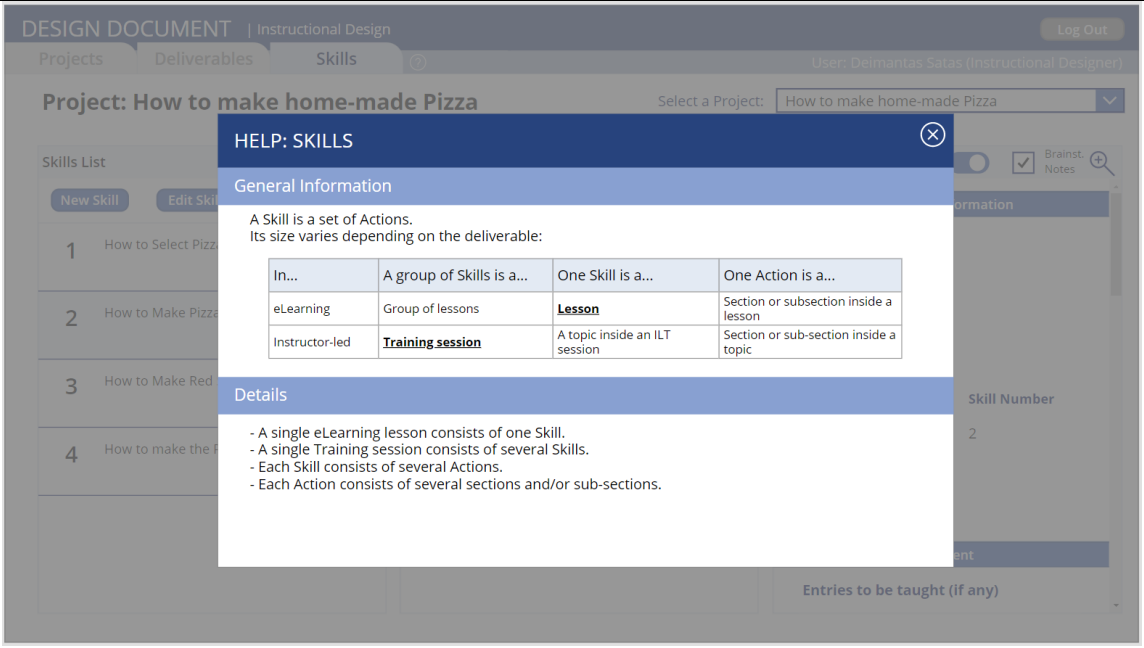
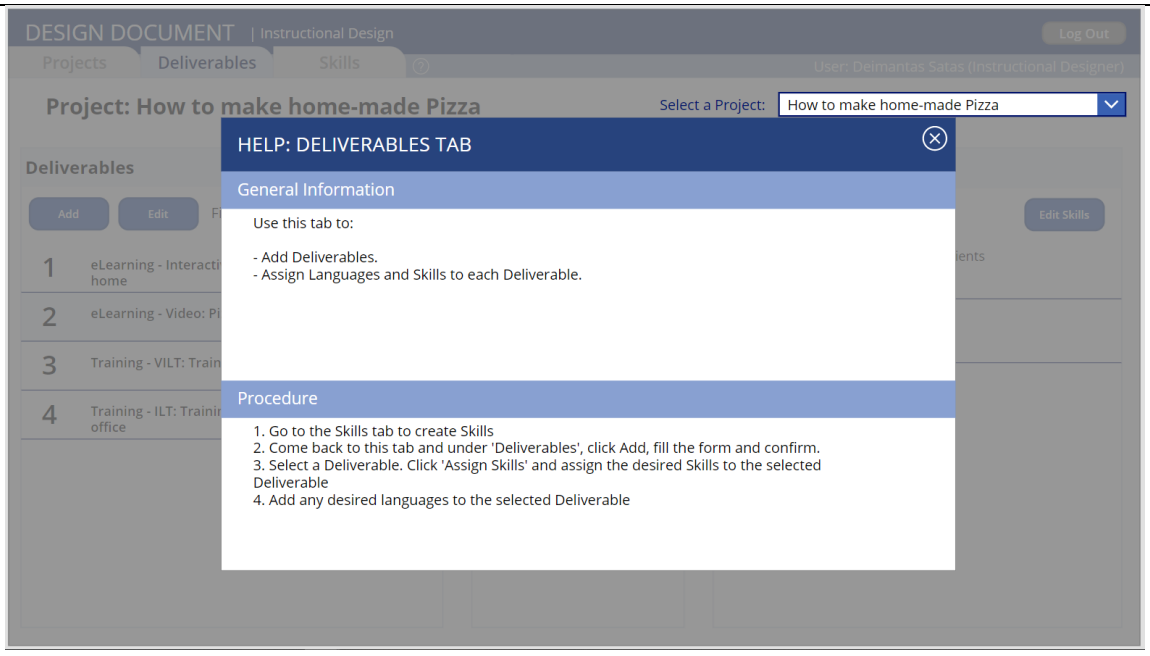
12.2 Sample 2: Informal learning

Since I was the software developer for the IDD Tool, I included Job-aids in the form of help screens within the IDD tool itself. When the user clicked the '?' button, a help screen was displayed. There were two kinds of help screens:

- Snippets of how adult learning theory is reflected in the IDD tool (such as example 1)
- Procedure reminders (such as example 2)

Example 1: The scope of skills and how it affects data entry in the IDD tool	
Example2: The procedure within the Deliverables tab of the IDD tool	

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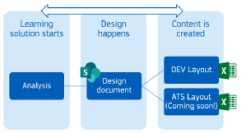
12.3 Sample 3: Informal Learning

This is a quick-start guide for the older version of the IDD tool, which was a prototype in SharePoint/MsExcel.

Overview



The design document:

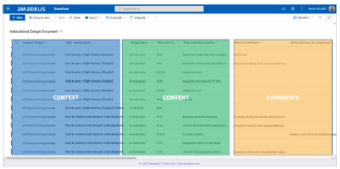
- Gets information from a learning analysis
- Stores all learning design information
- Generates layouts for designers, developers, trainers, etc.

SharePoint: creating the design

The SharePoint contains 3 types of columns.
In here, saying "we" means "the design team".

1. Context: the categories we use for grouping each design
2. Content: the information we want to teach
3. Comments: the notes we share among us, or with other teams

Click here for more information on each column



Design Structure

The information in the SharePoint is categorized by three levels

- Product/Project is the biggest category
- One Product/Project contains several Lessons
- One Lesson contains several Skill/Action items

How to use the SharePoint list

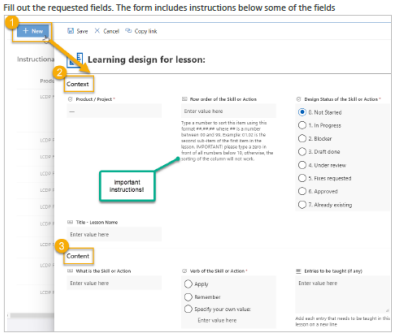
1. Filter the context in the Product/Project column.
   Click in the column > *Filter by* > select the *Product/Project*.
2. After filtering by product/project, you have two alternatives.
   a. Fill out the form, or
   b. Type directly using *Grid View*

Use (a) if you're unfamiliar with this SharePoint list.

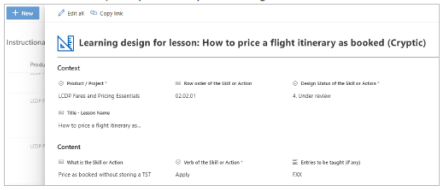
Alternative 1: Fill out the form

This is the easy way for new users.

1. Click *+New*
2. Fill out the requested fields. The form includes instructions below some of the fields



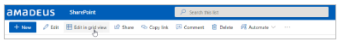
3. Click Save
   A new row will be added, which you can edit by double clicking it



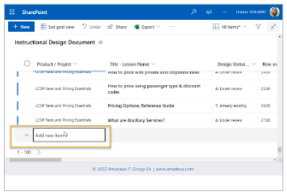
Alternative 2: Fill out with Grid view

This is fastest if you are familiar with the purpose of each column

1. Click *Edit in Grid View*



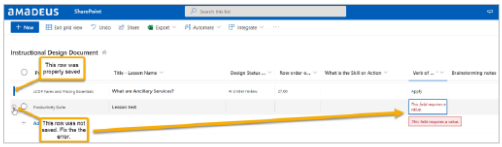
2. Scroll to the bottom of the table and click *Add new item*



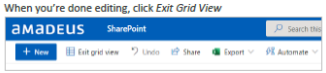
3. Fill out each column.

Important! For the "Row Order" column, type a number with the ##.###.## format, where ## is a number between 00 and 99.
This is necessary:
1. For the sorting of the column to work properly, and
2. For the Developer Layout to include all the correct information.

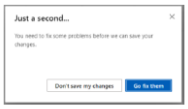
4. Confirm the entry is complete.
   a. Click out on any other row
   b. The left side of the column should show a blue line
   c. If it shows a red exclamation mark, it means you must fix one of the fields. To do it:
      i. Click on the red exclamation mark.
      ii. The required fix will be displayed.



5. When you're done editing, click *Exit Grid View*



6. If there are rows with errors, SharePoint will display a message



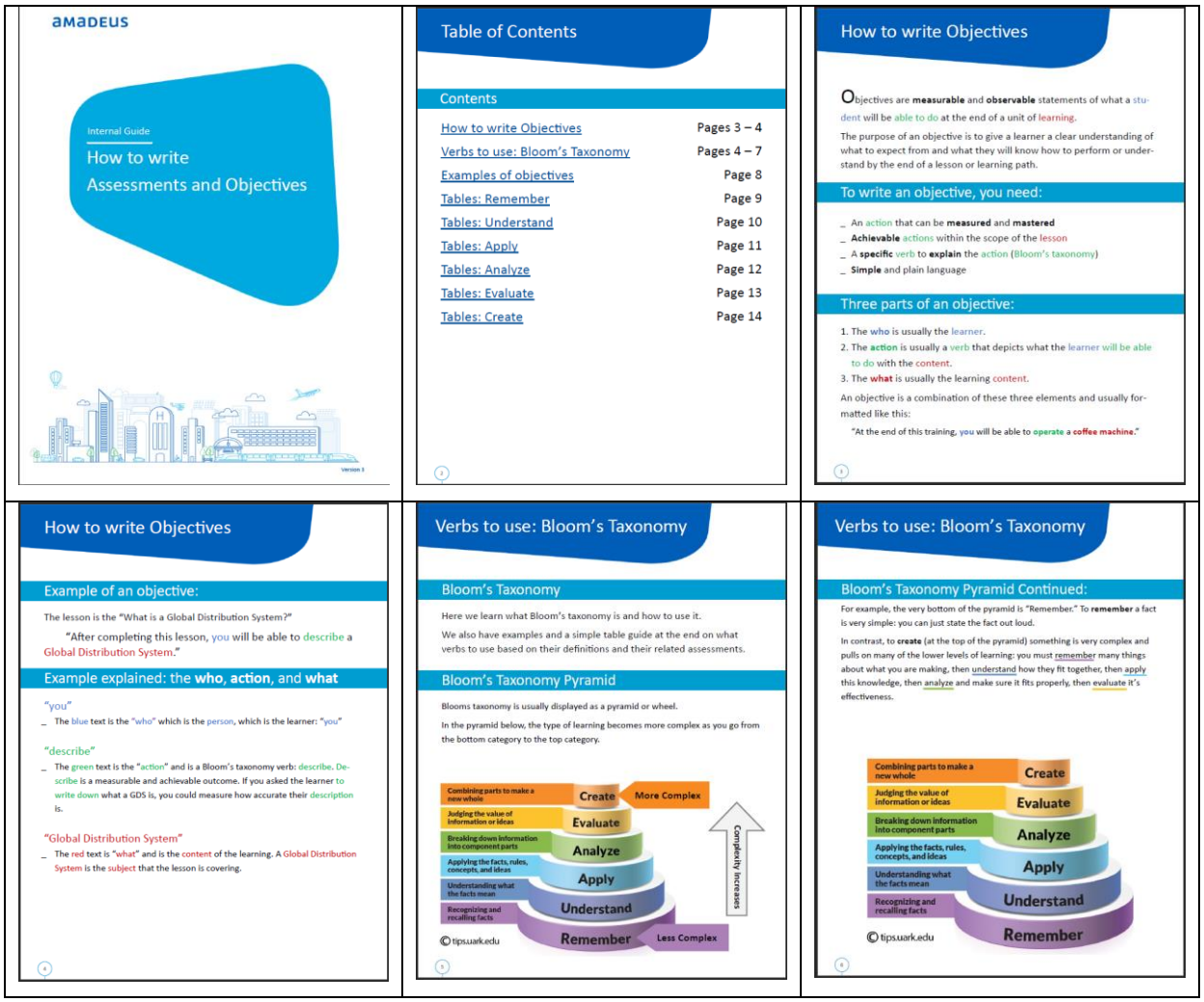
13. Sample of curated of materials

The curated material is a document called “How to write learning objectives”, which I used as a support document back at the start of the ODCD training program.

I selected it because it was previously used as a training material created by knowledge management to help instructional designers and content developers in my department so they could improve their objective-writing ability.

As part of the IDD Learning Project, I incorporated this document for the “R” stage of the ROPES design for learners to recall previous trainings and gather their knowledge about learning objectives, which is valuable information for them to contextualize the way the IDD tool is laid out and how it leverages adult learning theory as the core of the user experience for the creation and documentation of lesson plans. This curated material aids the learning and retention of content by leveraging previous knowledge about objectives and putting it in the context of the new training materials I added in the first sample of subsection #12.

Find the sample screenshots below. The order is from left to right, row by row from the top.



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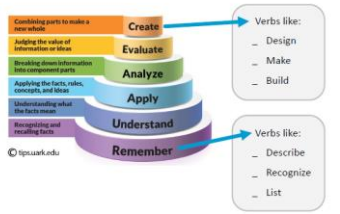
Verbs to use: Bloom's Taxonomy

Verbs in Bloom's Taxonomy:

Each category is broken down into verbs. For example, the Remember category has verbs such as "define, label, recall, and describe." Whereas the Create category has verbs such as "compose, organize, design, and explain."

In the next section, we break down the verbs in each category to be paired with definitions and the types of assessments that can be used in eLearning.



Examples of objectives

Below is a short list of objectives that can be used as a template for your own objectives. Feel free to copy and paste and then change the subject matter to reflect your own objectives. Each verb is underlined with the color that corresponds to the level on Bloom's taxonomy pyramid.

After completing this lesson, you will be able to:

- Describe a fare family.
- List the five mandatory elements of a PNR.
- Interpret an availability display.
- Compare two fare basis.
- Construct a complete PNR.
- Differentiate the restrictions of two fare basis.
- Determine the last date in which a ticket needs to be issued.
- Summarize the most important points in a fare basis.
- Plan a customer's itinerary.
- Formulate the best method for creating a PNR.

Tables: Remember

Remember/Knowledge: to recall or recognize or remember terms, facts, and concepts.

Verbs: Recall, recognize, identify, state, list, defines, describes, identifies, knows, labels, lists, matches, names, outlines, reproduces, selects, states

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Describe	To depict in written or spoken words	Fill in the blank, multiple choice	Ask students to describe something within a display or what a command is for.	Describe a fare family.
Recall	To bring back from memory	Fill in the blank, multiple choice	Ask students to recall something taught from a previous lesson.	Recall the command for an availability display.
Recognize	To identify something previously seen	Hotspot, labeling, drag and drop	Ask students to point out a specific object in a display, such as the line that displays the name in a PNR.	Recognize the name field in a PNR.
Identify	To establish something as being a particular thing	Matching, hotspot, multiple choice Show two screens and ask user to choose one based on definition.	Ask students to identify a specific item. You can display two different displays and ask the "specific item" can be on just one of the displays.	Identify an availability display.
List	To write down a set of names or items in a meaningful group or sequence	Drag and drop, labeling, matching,	Ask the students to write down, from memory, all the commands that they learned from the lesson.	List the five mandatory elements of a PNR.

Tables: Understand

Understand/Comprehend: to understand the nature or meaning of something.

Verbs: Interpret, exemplify, classify, summarize, infer, compare, explain

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Interpret	Give or provide meaning	While showing content (screenshot): drag and drop, fill in the blank, multiple choice	Show an availability display and ask to provide meaning to specific areas of the display.	Interpret an availability display.
Exemplify	Show or illustrate as an example	Ask user to enter the command to do a specific task.	Ask someone to book a hotel in skilling.	Exemplify a hotel booking process.
Classify	To assign, arrange, or organize by class	Drag and drop	List a set of items, like seating classes, and have the students classify them.	Classify the types of aircraft in an availability display.
Compare	Examine 2 or more things and note similarities and differences	Put two screens next to each other and compare.	List a set of items, like seating classes, and have the students compare them.	Compare two availability displays.
Infer	Draw a conclusion through reasoning	Scenario based questions, using several methods (fill in the blank, multiple choice,	Give a scenario with specific variables, such as a specific fare policy, and ask the students to infer the impact of the policy on the air booking.	Infer the impact of a fare policy on a client.
Explain	To make plain or clear or known in detail	Fill in the blank	Ask a student to explain what something is, for example, a fare family.	Explain a fare family.

Tables: Apply

Application/Apply: To make use of knowledge through action.

Verbs: Complete, construct, demonstrate, interpret, practice, use, implement

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Complete	To finish or make whole or entire.	Puzzle style drag and drop, fill in the blank	Give the students a set of puzzle pieces and have them put the puzzle together. OR give the students an incomplete booking and ask them what is missing.	Complete a hotel booking.
Construct	To build by putting together parts	Puzzle style drag and drop	Give the students a set of puzzle pieces and have them put the puzzle together. OR give the students an incomplete booking and ask them what is missing.	Construct a complete PNR.
Demonstrate	To exhibit or show; to describe, explain, or illustrate by example.	Scenario based "guide me"	Have a student demonstrate how to search for air availability.	Demonstrate a car rental booking.
Interpret	Give or provide meaning	Present a screen or other information and: Fill in the blank, multiple choice, hotspot	Show a screen to students and ask to interpret a specific area of the display.	Interpret an availability display.
Practice	To train in something in order to gain proficiency	Scenario based "guide me"	Make a list of commands and have the students enter commands for different types of air searches.	Practice booking car rentals.
Use	To put something into or employ for some service	Give certain information for the user to then need to use for a Scenario based "guide me"	Give students a piece of information about something like a fare family and ask them to use the information to finish the PNR.	Use commands in SECO.
Implement	To fulfill, perform, or carry out	Give certain information for the user to then need to use for: a Scenario based "guide me", fill in the blank, hot spot	Give students a piece of information about something like a fare family and ask them to implement the information to finish the PNR.	Implement a booking policy while booking air travel.

Tables: Analyze

Analysis/Analyze: Distinguishing between two or more parts of things.

Verbs: Analyze, categorize, compare, contrast, differentiate.

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Analyze	To examine critically, so as to bring out the essential elements or give the essence of.	While seeing content: Hotspot and compare two or more options,	Show a PNR and other information that relates to the PNR and ask the students to draw conclusions about the information.	Analyze an availability display.
Categorize	To classify or describe by labeling or giving a name to	While seeing content: Drag and drop into different categories	Give the students a set of information and ask them to sort and categorize the information.	Categorize seat classes.
Compare	To examine two or more things and note similarities or differences	While seeing content: Drag and drop characteristics of something into a Venn diagram, label similarities or differences using drag and drop	Give students two fare families and ask the students to compare the two.	Compare the viability of a set of fare families while considering company booking policies.
Contrast	To compare in order to show unlikeness or differences	While seeing content: Label differences using drag and drop	Give students two fare families and ask the students to contrast the two.	Contrast two PNRs.
Differentiate	To form or mark differently from other such things	While seeing content: show two different flight segments and use hotspots to ask questions about some of the differences between the two segments.	Show two availability displays and ask the students to point out the difference between the two displays.	Differentiate the time between two flight segments that have the same departure and arrival locations.

Tables: Evaluate

Evaluating/Evaluate: Make judgements about the value of ideas or materials.

Verbs: Compare, explain, evaluate, and summarize

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Compare	Examine 2 or more things and note similarities and differences.	Put two screens next to each other and compare.	List a set of items, like seating classes, and have the students compare them.	Compare two availability displays.
Explain	To make plain or clear.	Fill in the blank and ask the student to explain a topic.	Ask students to give an explanation for something.	Explain a the purpose of a ticketing time limit.
Evaluate	To judge or determine the significance, worth, or quality of.	Give True or false when presented with a screen (e.g., present a PNR and ask if it is ready to be ticketed)	Ask students if something is complete or not. Ask students to judge or evaluate something.	Evaluate a PNR's readiness to ticket.
Summarize	To state or express in a concise form.	Fill in the blank and ask the student to summarize a topic.	Ask a student to summarize a topic or something.	Summarize the most important points in a fare basis.
Determine	To conclude or ascertain after reasoning or observation.	Fill in the blank or multiple choice when the student is given a specific scenario in which the student would have to combine multiple variables or ideas.	Ask the student to tell you the answer to something, like what date a ticket needs to be issued, when you present them with a specific scenario and the student needs to put together multiple ideas or variables.	Determine the last date in which a ticket needs to be issued.

Tables: Create

Creating/Create: build a structure or pattern from diverse elements.

Verbs: plan, combine, create, organize, devise, formulate

Verbs	Definition	Storyline Assessments	Instructor led Assessments Not just a test! These assessments are also useful during the lesson to gauge the progress of learning!	Examples of Objective "After completing this lesson you will be able to..."
Plan	To arrange a method or scheme using elements.	Use drag and drop to have the user plan an order of steps.	Ask the users to write down a plan on how the user would do something when presented with a specific situation.	Plan your morning routine based on your queues.
Combine	To bring together into a whole or a close union.	Use drag and drop to have the user take a separate piece of information among many and have the user add that piece to a bigger puzzle.	Ask the users to take multiple pieces of something, like a multi-destination itinerary, and combine them logically.	Combine multiple air segments to create a complete itinerary.
Create	To cause something to come into being from one's own thoughts or imagination.	Use fill in the blank to have the user create something, like a PNR.	Ask the users to create something from scratch.	Create a PNR.
Organize	To form into a whole consisting of interdependent or coordinated parts.	Use drag and drop and ask the user to organize something, like pieces taken from an availability display.	Give the users multiple pieces of something and ask them to organize the pieces.	Organize your desk space so that your keyboard and mouse are easily useable.
Devise	To invent from existing principles or ideas; to form a plan.	Multiple choice when presenting the user with a scenario that has multiple variables to understand and consider.	Give the users some rules and then give the users a scenario in which the rules would need to be considered while creating a solution.	Devise the best method for creating a PNR.
Formulate	To devise or develop a method or system.	Drag and drop and have the user put together a method or a system for a specific need or question, like asking the user to decide what order the user should do something.	Ask the users how they would perform a certain task.	Formulate the best method for creating a PNR.

Section 4: Evaluation Plan

This section provides samples of the project's evaluation based on Kirkpatrick's four levels.

14. Evaluation samples: Kirkpatrick Level 1 (Learner Reaction)

This section includes some transcribed questions from an anonymous survey I sent after the training session.
These were originally created on a Likert scale, but I modified them to be performance-focused as per Talheimer's recommendation and guidelines. In my opinion, Likert scales optimize the extraneous cognitive load, which is beneficial, but I wasn't sure if using Likert reduced the usability of the survey results for data analysts in the team, so I decided to change it.

Here are the samples:

1. Select the phrase that best describes how the training session makes a valuable use of your time.
    a. The training session was a complete waste of my time
    b. The training session was a mild waste of my time
    c. The training session was not a waste of time
    d. The training session made a good use of my time
    e. The training session made an excellent use of my time
2. Please justify your answer to the previous question.

    _____
    _____
    _____

3. Select the phrase that best describes the amount of content in the session.
    a. The session covered an overwhelming amount of content
    b. The session covered a high amount of content
    c. The session covered the right amount of content
    d. The session didn't cover as much content as I expected
    e. The session didn't nearly cover enough content
4. Select the phrase that best describes the level of detail contained in this session.
    a. The session covered an excessive amount of detail
    b. The session covered a high amount of detail
    c. The session covered the right amount of detail
    d. The session didn't cover as much detail as I expected
    e. The session didn't nearly cover enough detail
5. Select the phrase that best describes your perception of the complexity of this session's content.
    a. The session's content was excessively complex
    b. The session's content was a little too complex
    c. The session's content was reasonably complex
    d. The session's content was not very complex
    e. The session's content was not complex at all
6. Select the phrase that best describes your intention to apply the skills taught in the session.
    a. I do not intend to apply any of the skills
    b. I do not intend to apply most of the skills
    c. I intend to apply just enough of the skills to meet process requirement
    d. I intend to apply all the skills
    e. I intend to apply all the skills and seek for best practices

7. Select the phrase that best describes your opinion about the training session being a one-on-one experience.
    a. This training should not be delivered in a one-on-one environment. It should be delivered in a group environment.
    b. Most of this training is not fit for a one-on-one environment.
    c. Most of this training is fit for a one-on-one environment.
    d. All of this training is acceptable as a one-on-one experience
    e. All of this training is productive and effective as a one-on-one experience
8. Select the phrase that best describes the relevancy of the session's content to your daily job.
    a. None of this content is relevant or applicable in my daily job
    b. Almost none of this content is relevant or applicable in my daily job
    c. Some of this content is relevant or applicable in my daily job
    d. Most of this content is relevant or applicable in my daily job
    e. All of this content is relevant or applicable in my daily job
9. Select the phrase that best describes the relevancy of the session's content to your individual performance.
    a. None of this content is relevant to my individual performance
    b. Almost none of this content is relevant to my individual performance
    c. Some of this content is relevant to my individual performance
    d. Most of this content is relevant to my individual performance
    e. All of this content is relevant to my individual performance

15. Evaluation samples: Kirkpatrick Level 2 (Learning assessment)

For level 2 evaluation, the measurement technique I used for this program is "Performance Observation", as outlined in subsection #18 of this document.

On top of that, here are some examples of questions I planned for a Level 2 assessment:

1. Select the navigation sequence to store the learning request sheet in the IDD tool.
    a. Project → Project Documents → Attachments (incorrect)
    b. Project → Project Details → Attachments (correct)
    c. Deliverables → References → Attachments (incorrect)
    d. Deliverables → Assigned Skills → Attachments (incorrect)
2. Select the correct statement about creating a lesson plan for one lesson in the IDD tool.
    a. The final version of a lesson plan can include enabling objectives from different topics
    (incorrect) (Feedback: all enabling objectives in a single lesson should belong to the same topic)
    b. Enabling objectives can be assigned any order in the final version of the lesson plan
    (incorrect) (Feedback: enabling objectives should be sequenced in order of complexity)
    c. The final version of each lesson should include a minimum of four enabling objectives
    (correct) (Feedback: four enabling objectives is the minimum. If you have less, determine if any objectives can be split, or brought over form other lessons. Otherwise, the lesson is too short. Consult with your peer instructional designer to find the optimal solution)
    d. Facts, evaluation, and entries are mandatory components for each enabling objective
    (incorrect) (Feedback: Entries are not mandatory. Facts, Procedures and Evaluation are.)

3. Select the final procedure section before meeting with content development to present the lesson plan.
    a. Fill out the IDD with SME content information
    (incorrect)
    b. Create the Deliverables container in the Developer tab
    (incorrect)
    c. Verify the lesson plan in the content developer layout
    (incorrect)
    d. Document the duration time in the Deliverables tab
    (correct)

    (General feedback for any correct or incorrect selection)
    The correct sequence is: 1. Gather SME content information, 2. Fill out the IDD with SME content information, 3. Verify the IDD is generating a proper layout for the content developer, and 4. Document the duration time.

4. Select the correct statement about the IDD tool documentation procedure.
    a. Lesson plans should be validated by both the SME and the content developer
    (correct) (Feedback: SME's validate content scope and content developers validate that the lesson plan contains enough information to proceed with content development)
    b. Content developers have the last word in terms of lesson plan content and sequence
    (incorrect) (Feedback: Instructional Designer has the final decision regarding lesson plan content and sequence)
    c. Lesson plans can be completed without storing SME content information
    (incorrect) (Feedback: the storage of SME content information is part of SME validation, which is a mandatory part of the documentation procedure)
    d. After meeting with development, its optional to update the IDD with the agreed changes
    (incorrect) (Feedback: updating agreed changes in the IDD lesson plan is a mandatory procedure step)

16. Evaluation samples: Kirkpatrick Level 3 (Behavioral change)

This subsection describes how job transfer was evaluated.

16.1 Design focus on behavioral transfer

To promote behavioral transfer to the job, this whole instructional design focuses on learner engagement at the cognitive state of Bloom's level 3, and sometimes it goes up to levels 4 and 5.

- The modality centers around the iteration of ILT, OTJ application, and feedback
  (see section "subsection #5").
- The objectives focus on action verbs like "plan", "reach alignment", and "generate"
  (see subsection #6)
- Each ILT session outline centers around procedure demonstration (facilitator) and procedure application (learner) of specific job tasks
  (see subsection #7)
- Learning events are grounded in adult learning principles
  (see subsection #8)
- Learning events aim specifically at job application through six overarching steps: review discussion, overview presentation, demonstration, practice, and self-evaluation. This last step helps the learner engage in cognitive activity at level 4 and 5 when they analyze and evaluate their own performance.
  (see subsection #10)
- ILT sessions are centered in the teaching job task procedures and having the learner self-evaluate their performance (cognitive levels 4 and 5)
  (see subsection #11)

16.2 Evaluating job transfer

The learning experience revolves around skill application, which sets a strong foundation for the likelihood of job transfer to happen. To measure said behavior, I used two evaluation techniques: Observation and Work Samples, each with its own measurement instrument (a rubric).

- **Observation**

  I scheduled sessions with each instructional designer and content developer to watch them applying the skills they learnt and to audit their decision making through a learning application rubric that includes the following criteria:

  - Navigation in the IDD tool is decisive and purposeful
  - Job-task order of execution is efficient
  - Job-task execution abides by the trained procedure
  - Learner properly documents their duration times in the time-tracking tool (In the Evaluation Plan, this is the job task that links behavioral change with organizational results. Please see Subsection #17 for more details)
  - When necessary, the learner uses informal learning resources (help screens and job-aids)
  - Procedure is applied to its full completion according to the related learning objective
  - Learner incorporates their own best practices to increase efficiency or productivity
  - Learner's performance reflects learning gaps that must be addressed (specify which)

- **Work Samples**

  I reviewed the work performed by learners. Such work is documented in the IDD tool. I graded each work piece through a QA rubric that included criteria such as:

  - The lesson plan is grounded on the provided SME content information
  - The SME content information is stored in the IDD tool
  - SME validation is obtained and documented before proceeding the handover to content development
  - Each lesson plan meets the minimum criteria (90% abidance minimum):
    - At least four enabling objectives (specify how many)
    - Each enabling objective in each lesson belongs to the same topic
    - Enabling objectives in each lesson are sequenced from low to high complexity
    - Each enabling objective includes fact information
    - Each enabling objective includes procedure information
    - Each enabling objective includes evaluation information

17. Evaluation samples: Kirkpatrick Level 4 (Organizational change)

Review of the organizational outcome

Let's refer back to the project's organizational outcome, as described in subsection #1 of this document:

Organizational outcomes

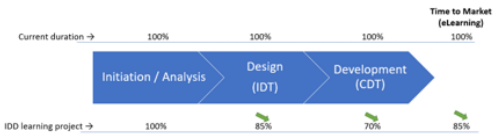
The IDD learning program looks to improve two metrics:

- "Content Development Time" (CDT)[2], for the Content Development team within XYZ,
- "Instructional Design Time" (IDT)[2], for the Instr.Design team within XYZ, and, by extension,
- "Time to Market" (TTM)[2] for the XYZ team in the segment of eLearning delivery

[1] For confidentiality reasons, I will use fake names to reference the structure of my company, including team names such as XYZ.

[2] These metrics don't exist in the XYZ team. I am measuring them for the IDD learning project and for ATD's Master Instructional Designer program.

Through the IDD learning project, I am aiming to reduce CDT by 30% per project, as well as IDT by 15% per project. This is roughly the same as reducing XYZ's team TTM by 15% on the segment of eLearning deliverables.



Collecting the evidence

To determine if this organizational result was achieved, I proposed measuring individual metrics for each instructional designer and content developer through a time tracking tool. The use of this time tracking tool is part of the job tasks included in the training, as shown in the table below. The accuracy of the time tracking is part of the behavioral changes that are measured in the evaluation plan (see subsection #16), which directly links the learning experience with the organizational objectives.

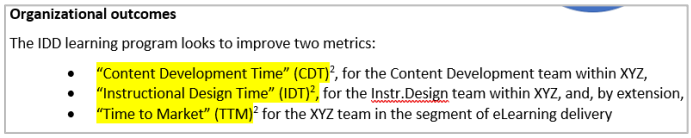
Role	VILT Session	Related Job tasks
Instructional Designer	A1	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Document their duration times
	A2	5. Meet with content developer to align regarding the learning sequence and other content details of the lesson 6. Update IDD according to changes generated during meetings with the Content Developer 7. Document their duration times
Convent Developer	B1	6. Use the IDD as a source for developing content for the lesson 7. Use the IDD as a source of suggested evaluation items for the lesson 8. Document their duration times
	B2	9. Meet with Instructional Designer to consult on the content and evaluation of the lesson 10. Document their duration times

As shown in the table above, the last job task in each VILT session relates to time-tracking. When learners perform a time-tracking task on the job, a record is generated in a database. A1/A2 generate data for IDT, and B1/B2 generate data for CDT. The table in subsection #18 summarizes how I planned for this data to be analyzed and presented.

18. Evaluation plan

This subsection justifies the evaluation at each of the Kirkpatrick levels and how I planned to capture, analyze, and share the results with the stakeholders.

The metrics described in this table were taken from subsection #1 (section "Organizational Outcomes").



Organizational outcomes

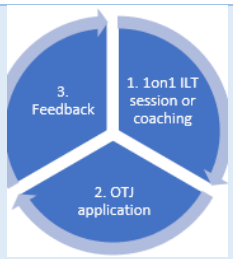
The IDD learning program looks to improve two metrics:

- "Content Development Time" (CDT)[2], for the Content Development team within XYZ,
- "Instructional Design Time" (IDT)[2], for the Instr.Design team within XYZ, and, by extension,
- "Time to Market" (TTM)[2] for the XYZ team in the segment of eLearning delivery

Please note that:

- I plan to present levels 4 and 5 in the same meeting, as it involves the same stakeholders.
- Below this table, there are some appendices that offer further detail
- Page breaks in this document might separate the information for one of the levels. Read carefully, please.

Level	Why/purpose	Capture	Analyze	Present/Share
5: ROI	To provide management with objective measurement to justify the value of the training project by comparing the cost of training and the increase in productivity	No capturing. ROI calculation based on level 4 measurements %ROI calculated as: $\frac{Value\ of\ TTM\ Saved - Training\ Costs\ x\ 100}{Training\ Costs}$ Where Value of TTM Saved = $\text{IDT Cost} + \text{CDT Cost}$ IDT means Instructional Design Time CDT means Content Development Time	- Compare IDT and CDT cost before and after the training to show how both metrics were reduced, leading to a cost reduction for the implementation of learning projects in the team thanks to the IDD training project. - Compare the calculated %ROI with benchmark data (extant data) from previous learning projects	Meet with department managers and present: - An executive summary of the IDD learning project - The project's ROI% and how it was calculated - The project's results in terms of metrics and cost savings (reduction in IDT cost and CDT cost) - A proposal for KPIs to leverage the staff's newly acquired skills - A proposal for time tracking and workload management based on the measured metrics. Then, I plan to lead a Q&A or discussion regarding the project's results and next steps.
4: Results	To provide management with an objective justification on the value created by the training project and its impact in individual performance	**Metric tracking (individual)** - Use time tracking tool to gather IDT for each Instructional Designer on a specific work assignment - Use time tracking tool to gather CDT for each content developer on a specific work assignment IDT means Instructional Design Time CDT means Content Development Time	**KPI calculation (aggregate)** - Calculate average IDT for the whole team - Calculate average CDT for the whole team - Compare avg IDT and avg CDT with pre-training metrics - Identify opportunities to enhance the TTM KPI TTM means Time to Market	
3: Behavior	To drive adoption of the training's behaviors and identify opportunities to invite learners to participate in further informal/formal training to continue to improve their skills	**Observation** Schedule shadowing sessions with each Instructional Designer and Content Developer to audit how they apply the trained procedures in the IDD tool, as well as their use of informal resources such as the job aid and the help screens, as described in " subsection #4", and in subsection # 12 of this document, respectively. For more information, search this document using the keywords "job aid" or "help screen"	- Summarize the info into an excel spreadsheet to display the learners' procedure abidance for each job task (for more detail on the evaluated job tasks, see Appendix A below this table) - Compare the procedure abidance data against the project's learning objectives - Identify performance gaps and productivity efficiencies per each job task	Meet with content developers and instructional designers according to the delivery strategy (see image below, focusing on step 3: feedback) For more information, refer to "subsection #5" of this document

		Work samples Log into the IDD tool and review the content planning information documented by each Instructional Designer and Content Developer. Make notes on how they properly followed the trained procedure and which areas of improvement are reflected in their finished work.	- Summarize efficiencies and gaps to make decisions about how to improve the learning	 Examples of how to present and share findings within the delivery strategy: - Use the findings to structure the feedback sessions and future ILT sessions - Communicate line managers about the findings - Schedule follow up sessions with each Instructional designer and content developer to share best practices (found efficiencies) and refresh-train individuals whose performance is not up to par.
2: Learning	To help the learners reflect on their ability to perform the required job tasks	Performance observation: guided application During the ILT session, the learner will perform the job tasks and engage in a discussion with the facilitator. The evaluation data is gathered by the facilitator during the activity's practice, discussion, and coaching stages. The facilitator fills out a learning evaluation form during/after the interaction.	This analysis happens live, during the ILT session - Identify patterns in the learner's application of each job task's procedure - Determine: did the learner achieve the learning objectives? Why? - What are the performance efficiencies displayed by the learner (if any)? - What are the learning gaps displayed by the learner (if any)?	During the ILT session's Exercise and Summary sections, the facilitator shares the evaluation results and analysis with the learner. They then discuss about areas of improvement in the procedure and in the learner's interpretation of how the procedure is applied in the IDD tool environment. (For more information about the ILT session's Exercise and Summary sections, see Appendix B below this table)
1: Reaction	To gather the perceived value of the training based on the learners' experience	Survey	- Aim for 100% response rate (there are less than 20 respondents, so I can follow up with each individual) - Calculate percentage of responses for each answer - Derive patterns from the identified percentages - Gather common themes among the survey's comments - Use the patterns and themes to make decisions on how to improve the learner's experience for upcoming sessions or iterations of the project's learning events.	Gather respondents and their line managers in a 30-minute meeting and present the results, as well as my analysis, including: • Patterns and trends • Themes • Identified gaps • My action plan to improve the learning experience for upcoming sessions or iterations of the project's learning events Then, I plan to lead a discussion / brainstorm session for learners to share their opinions on the presentation, as well as to provide recommendations to improve the learning experience based on the gathered data.

Appendix

Appendix A

Evaluation Plan, Level 3: Job Tasks List

To properly analyze level 3, data is gathered through observation and work samples and then summarized per job task in a spreadsheet.

This table specifies the job-tasks for such spreadsheet.

For more information on job tasks, refer to subsection #11 of this document.

Role	VILT Session	Related Job tasks
Instructional Designer	A1	1. Gather SME content information 2. Fill out the IDD* with SME content information 3. Verify the IDD is generating a proper layout that the Content Developer needs 4. Document their duration times
	A2	5. Meet with content developer to align regarding the learning sequence and other content details of the lesson 6. Update IDD according to changes generated during meetings with the Content Developer 7. Document their duration times
Convent Developer	B1	6. Use the IDD as a source for developing content for the lesson 7. Use the IDD as a source of suggested evaluation items for the lesson 8. Document their duration times
	B2	9. Meet with Instructional Designer to consult on the content and evaluation of the lesson 10. Document their duration times

Appendix B

Evaluation Plan, Level 2: ROPES summary

The presentation of Level 2 evaluation is performed "right after the practice" during the ILT sessions.

The table below highlights the stages of the session at which measurement results are documented and shared.

When the learner does hands-on practice, the facilitator documents their observations using a rubric, and after that, during the discussion and coaching/shadowing part, the facilitator shares objective feedback with the learner. All feedback is grounded on the rubric to guarantee its free of bias or opinion.

For more information on ILT session outlines, please refer to subsection #7, ROPES summary of this document

Objective	Stage	Topic	Learning Method	Materials/Media	Estimated Time
Plan one lesson	Review	Overview of existing process	Discussion	• Current Design Document (Excel format) • Example of a lesson design draft within the current Design Document	5 min.
	Overview	IDD tool benefits for planning a lesson (WIIFM)	Presentation	• PowerPoint slides	2 min.
		IDD tool UI summary: lesson planning screens	Demonstration	• PowerPoint slides • IDD Tool	3 min.
		IDD user roles	Presentation	• PowerPoint slides	3 min.
	Presentation	Demonstration: Job tasks 1, 2, 3, and 6	Summary of steps Demonstration	One cycle per job task, except for #6*: • Flow Chart outlining task steps • IDD Tool *Task #6 is the final step of each task.	2 min./cycle Total: 6 min
	Exercise	Practice with the IDD tool: Job tasks 1, 2, 3, and 6* *Task #6 is the final step of each task.	Hands-on practice (Job task procedure) Discussion Coaching/Shadowing	• MsTeams Screen share with "Request Control" active • IDD Tool	7 min. per job task Total: 21 min.
	Summary	Self-evaluation method and Job aids overview: Job tasks 1, 2, 3, and 6* *Task #6 is the final step of each task.	Presentation Hands-on practice (self–evaluation) Discussion Coaching/Shadowing	• PowerPoint slides with procedure summary • Job aid	3 min. per job task Total: 9 min.