

Unit Plan for Adult Learning

Professional Context		Learner Profile
Setting	This setting is a professional development within a public high school	The learners for this professional development are 9-12 th grade high school teachers. Their experience ranges from 1 year to 25 years, with varied levels of education including bachelors, masters, and doctorates. The learners are representative of all races and genders, with the ages of the learners spanning from 22 years old to 67 years old. This staff development will take place during designated professional development periods, lasting 50 minutes, including about 50 teachers in each session. The teachers are to be grouped by grade and subject level in their TCTs (teacher collaboration teams). There are 6-10 teachers per TCT. Within the professional development, teachers will work in their TCT’s, using previously created assessment and scaffolding materials. A major point of contention is that teachers have team created summative assessments but independently created scaffolds. Each team is at a different readiness level, with some teams rarely using scaffolds unless legally required for IEPs, and others having extremely personalized, need-dependent scaffolds. TCTs meet at least once a week and are required to build summative and formative assessments collaboratively, but not the scaffolds, exposing an issue with scaffold alignment. These scaffolds also need to have the same branding across grade and subject levels. Aligning scaffolds for each grade and level will promote the standardization of the tool within all classrooms and alignment to the skills assessed in the summative assessments. By the end of the professional development, all learners will have a scaffold for a subject and grade specific summative assessment (with a shared header across all grades and subjects), and subject and grade specific scaffolding.
Topic/Title of Unit	TCT Scaffolding Alignment Implementation	
Total Duration	Synchronously in two, 50-minute sessions (100 minutes total)	

Theoretical Framework Connection

The theories that inform this lesson plan are andragogy and self-directed learning theory, specifically Grow’s Staged model of SDL. Andragogy informed my approach through Knowles six assumptions, mainly problem-oriented, experience, readiness, and responsibility. These learners need to decide what is needed in their scaffolds, based on their subject-specific work. They cannot arrive at this conclusion without leveraging their experience seen through their use of pre-existing materials and discussion about what is needed for their students (Knapke et al., 2024). They have a responsibility as educators to provide support to all students, especially students below grade-level. Outlining the need for scaffolding as a facilitator but offering time for teams to develop this scaffold supports their readiness and responsibility as adult learners. SDL informed my approach through how the subject and grade specific teams work together within one, whole-group session. All TCTs will be offered a guide for structuring their scaffolds by the facilitators and may use it based on need level. Facilitators are to create a prompting reference, usable across all teams, that guides adult learners are different stages towards a constructive discussion. This will include questions like “what do your ELL learners typically struggle with?” or “what is a skill learners often struggle with?”. A guide like this ensures that groups stay on task if they get stuck and provides a guideline for learners with different readiness levels (du Toit-Brits et al., 2024). My educational philosophy is that facilitators need to lean on respecting their learning audience through creating relevant development programs built on the learning audience’s experiences.

Unit Overview

This unit gives TCTs a structured process for developing shared scaffolds to directly support student needs for summative assessments. In this case, educators will be using one unit as the pilot of this scaffold. They evaluate this scaffold against real qualitative and quantitative data gained from tracking student growth and opinions from scaffold use during the formative assessment to the coinciding summative assessment. Currently, there is a gap in alignment from session 1 with how many teams even use scaffolds. Session one standardizes scaffold use and branding through a facilitator developed header to establish scaffolds as an accessible tool in all classrooms, and focus on subject and grade specific student needs. This helps establish respect and rapport with the adult learners, especially given the time constraints (Knapke et al., 2024). The facilitator will create two google forms for the learning audience to deliver to their students alongside the scaffold during the formative and summative assessment. Session 2 takes place 3-4 weeks after the first session to ensure educators have enough time to deliver both the formative and summative assessment in their unit. Teams will evaluate the effectiveness of the scaffold given their testing data and the student data from the facilitator created surveys. This makes session 2 an evidence-based revision cycle where educators will pair scaffolds directly to a rubric with a feedback bank, highlighting what skills the assessment measures that the scaffold helps students meet, along with common student feedback to better future practices in scaffold design.

Unit Objectives
LO1 Identify a specific skill students struggle most with in a summative assessment
LO2 Design a shared scaffold addressing specific student needs for a summative assessment
LO3 Plan the formative assessment the shared scaffold will be applied to ensure summative alignment.
LO4 Analyze student performance data against targeted skills
LO5 Evaluate data and feedback through a structured protocol
LO5 Collaborate with TCT to identify further and/or remaining student needs.
LO6 Create a new scaffold utilizing data and Google Docs comment and changes feature

Materials and Resources

- TCT-specific summative assessments (within a team-shared Google Drive folder)
- Group-created scaffolds (within personal Google Drive), with newly applied track changes feature
- Laptops
- Facilitator-made guiding question resource for scaffold redesign
- Facilitator-made google form with student data (feedback data)
- Tables with TCT designation
- Space to hold all participants
- Facilitator-made agenda / slides for a visual reference and guide
- Grades from summative assessment data (student performance data)
- Seen on Google Classrooms student analytics page, teachers must ensure their summatives are graded

Preparation

- Facilitator exports student data from TCT’s Google Classroom and run it through a Google Script to track changes from formative and summative assessment, and group based on student scaffold use.
 - Students using scaffolds in one category to not using scaffolds as an outlier
- Facilitator created rubric template (for reference)
- Facilitator created guiding questions for collaboration in data analysis

Unit Organization and Sequence
Session 1: TCT Scaffolding Alignment / Duration: 50 minutes/hours
Opening/Engagement (5 minutes) The session will open with myself or the facilitator describing a shared concern amongst educators regarding disaggregated skill levels amongst learners. The facilitator should reaffirm that the gaps present amongst students are not due to the teachers but must be addressed by teachers. Developing different scaffolds for every learner is impractical and difficult to adhere to over the course of a school year. Along with this, many educators have their own scaffolds they use to support their learners. The goal of this professional development is for teacher collaboration teams to synthesize their pre-existing scaffolds into one scaffold that addresses major student needs for a specific unit/summative assessment. To reaffirm a scaffold as a support for all students in all classes, the facilitator has created a document that all teachers within the training will design in. The only thing in the document is a shared header, promoting alignment of scaffolds as an integral support in all classrooms. To ensure that the content of the scaffold is effective and relevant, TCT’s will work in teams to create a shared scaffold for an upcoming summative assessment, that will then be applied during the formative assessment for that unit. Theoretical Connection: Knowles assumption of readiness and needing to know is addressed in the opening for the activity. Educators are made aware of why this content is relevant for their practice and overall identity of support tools within the school as a whole. The facilitator frames the scope of the professional development to one, well-developed scaffold that the educators create as a team based on the needs of their specific content area (Knapke et al., 2024). Development Activities (40 minutes) Activity 1: Summative Learning Need Breakdown ~15 minutes Each TCT will identify their upcoming summative and discuss the strongest areas of need for their students. After discussion, learners will identify the area with the strongest needs based on summative assessment data and anecdotal experience. This need will shape the creation and synthesis of their scaffold. Facilitator will flip between slides for a visual guide and agenda for reference. The visual should provide tips for learners and reminders so learners at different readiness levels receive support. Activity 2: Building the Scaffold ~25 minutes Learners will build out a scaffold within the facilitator-shared document. Teams will share scaffolds they had previously created and agree on how to construct the new scaffold together. Not only will pre-existing work be synthesized in the scaffold, but learners will have time to further develop new aspects of the scaffold based on the identified need if not addressed. This is where TCTs can reference the guiding questions for scaffold development if needed. A visual agenda should be present so learners can self-manage their time. Theoretical Connection: Both activity 1 and 2 require learners to use their prior experience and pre-existing materials to engage effectively in the professional development. This approach is tied to andragogy, as learners use their experience in their learning. Knowles assumption of learners being problem-oriented is clear here, with learners basing their scaffold on a problem specific to their context (identifying and solving for student need) (Roberts et al., 2024). Grow’s Staged SDL theory is seen in the supports provided to the learners. Learners are given multiple examples, references, and guides that they may use based on need. Similar to how the scaffold created will be available to all students, the guides given to the educators are not going to be used by every learner. Some learners are at a stage of piquing interest and others are completely self-directed in this endeavor. In order to work together effectively and not detract from the learning experience, learners that are not yet self-directed require the visual and guiding supports supplied by facilitators (Merriam, 2001). Application/Practice (5 minutes) Application: Plan a rollout date for the scaffold ~3 minutes Learners will need to apply this scaffold when administering a formative assessment. The formative assessment must be tied to the summative, and all educators within the TCT will need to agree on a specific activity and date range this will happen. One the date is planned, TCTs are to select a date to discuss their findings. TCT groups meet at least once a week, so dedicating time to discussing the data elicited from this material is essential for a proper design cycle. Application: Attach scaffold to shared unit plan and share with facilitators ~2 minutes Learners will attach this scaffold in the shared unit place that the scaffold is for and share it with facilitators. Learners should also take this as an opportunity to organize their Google Drives with the new material and embed it as a link in the pre-existing formative and summative documents. Facilitators will be able to see their work assess productivity and learners will have a dedicated “home base” for the material. Theoretical Connection: Grows staged SDL informs a majority of this practice. Educators in the training are at different points with their individual classes. Some move slower or faster dependent on their learning audience. Allocating time to identify a formative assessment that each teacher within a TCT works on, allows educators to move at their own pace without falling behind in implementation (du Toit-Brits et al., 2024). After a formative is agreed on, educators will use the tool again for the shared summative assessmnet. Piloting the scaffold with a formative and summative allows educators to gain data behind its effectiveness from formative use to summative use. Facilitators will give a short google form survey to teachers for their students to take at the end of the summative assessment that tracks qualitative data about how students felt about the scaffolds effectiveness. This will be paired with grade-based, quantitative feedback that teachers will look at in a future session to determine effectiveness. Discussion/Reflection Questions Why do you think your chosen student need area is a struggle point across all students? Did your teams' existing scaffolds already address the learner gap? Why or why not. Were there any moments of disagreement in deciding how you would create the scaffold? Did the pre-existing materials aid in making a final decision? What future units and assessments do you think would aid from a shared scaffold? Assessment/Evaluation 1 Formative I will address the learning formatively through observation of teams as they work through the scaffold, paying close attention to which groups seem to need more support or structure. Assessment/Evaluation 2 Summative I will address the learning summatively through the finalized scaffold TCTs build. This scaffold will be attached to the learning team's unit planner in the specific unit it is intended for.

Differentiation/Accommodation Strategies TCTs that already have aligned scaffolds can move directly into development instead of synthesizing pre-existing individual scaffolds. The reference guide that is provided is not a needed support as they are already in their self-directed stage. The support could help affirm their choices, but it does not have the same purpose as other TCTs at different stages. Facilitators would not need to provide as much support at this table and should instead focus on commentary that builds on their pre-existing scaffolds. TCTs with less experience will lean on the guiding question reference much more than other groups and may need more facilitator presence to ensure they are developing the correct materials. Something that could be included in this session is an example scaffold for teams that do not have scaffolds. Even though all teams should have some kind of pre-existing scaffold, having a go-to resource will prevent any conceptual confusion. There is also a great variety in the age and experiences of teachers, and this variety is generally split equally amongst TCTs. Facilitators should look out for the less-experienced teachers in group and internalize that some group members may be leaning on a reference and learning while others are actively engaging in discussion and collaboration. Instructor Reflection Did the facilitator set an appropriate scope for the lesson? Which teams relied heavily on the references and guides, and which did not? Were the activities appropriately timed and sequenced, or would the PD benefit from sequential and pacing modifications? Would any teams benefit for further instruction based on the final scaffold submitted?
Session 2: TCT Scaffolding Alignment / Duration: 50 minutes
Session 2 Learning Objectives
LO4 Analyze student performance data against targeted skills
LO5 Evaluate data and feedback through a structured protocol
LO5 Collaborate with TCT to identify further and/or remaining student needs
LO6 Create a new scaffold utilizing data and Google Docs comment and changes feature
Session 2 Learning Sequence:
Opening/Engagement (5-10 minutes)
Facilitator will open the session by refreshing educators about session 1 and the learning goals. The facilitator will review what has already been completed by the teachers, and outline the new tools educators will be using and where to find them (the rubric template, and a data analysis guide. TCTs will have 2 minutes to preview their own data report and share what stands out to them, helping prepare what they will be asked to do in the development phase of the professional development (Knapke et al., 2024). Facilitator should keep in mind learning adoption stages with data analysis and provide assistance when looking at graphs and navigating charts.
Development Activities (35 minutes)
Activity 1: Performance and Feedback Data Analysis (15 minutes) Each TCT will review the data that the facilitator has gathered and visualized via Google Script. They may begin with student performance data first or feedback data, they will both be in separate tabs and have a shared tab for comparison. TCTs will specifically look for the change from formative to summative based on the targeted skill for the scaffold. Teams will identify where the scaffold helps and where the gap still exists. After locating this data-driven gap, teams will reference the student feedback data to see if there is commentary about where or why students struggled. They will then use student feedback to help inform their new approach to the scaffold in the next activity. Activity 2: Scaffold Revisions (15-20 minutes) Once teams have analyzed and identified areas for growth, teams will redesign their scaffolds and use student feedback to inform their decisions. This is similar to session 1’s collaboration and scaffold built, but focuses more on supplementing as opposed to synthesizing scaffold designs. Teams will begin to identify common areas of feedback as well as they prepare for a rubric build at the end of the session.
Critical Thinking Component: Teams will use a structured data analysis format to conduct their data analysis. This will be shared on screen by a facilitator and does not required a separate guide. This will be formatted as a What?, So?, Now What? format (Mohamed et al., 2022). For example, “what did you find about the data, why is that important, and what do you do now?”. Critical thinking is also seen with how teams discuss the student feedback using guiding questions (separate from the charted data). This will be shared next to the student data slide as a reference (made by the facilitator). The guiding questions are “Where did students say they improved the most from the formative to the summative?”, “Does the student feedback provide support in modifying your scaffold? If so, how?”, “What does the student feedback data suggest about the scaffold overall?”. These questions are essential for reflection and actionable modification.
Collaborative Learning Component: Learners will work together in the same TCT structure as session 1, with TCTs sitting as a group discussing the shared group scaffold. The main difference is that instead of leveraging educator materials, we leverage educators' ability to respond to new data and make modifications based on said data. Facilitators will play a larger role in this PD than the previous one, as their expertise in analyzing data supplements educators in what they actually do with that data (O'Connor & Park, 2023). Teams and facilitators alike must collaborate for fruitful discussions to occur.
Technology Integration:

Learners use a great deal of technology in this session. TCTs will build out what they created in session one using Google Docs, Google Classroom Data analytics, and Google Script created charts. Since the data has already been gathered and structured by the facilitators, teams can focus on actually understanding the data and making revisions with the data in mind (Khulbe & Tammets, 2023). The scaffold initially created will become a comment-based document or teams will enable track changes, whichever they prefer. This promotes team collaboration outside of the session as well, allowing the document to be a joint resource as opposed to one person creating most of it and the rest of the team following along.

Unit Synthesis/Closure (10 minutes)

Teams will create a student feedback bank to revert back to when developing new scaffolds for future units. This will act as a running list of common issues with students mapped to the skills on the summative rubric that relate to them. Creating a scaffold linked to explicit student needs and the rubric requirements for the summative allow teams to not only create a more targeted scaffold, but aid in developing future materials for that course or skill. Facilitators will close by highlighting how strong scaffolding allows teams to design curriculum for specific areas of need in both this and future units. The scaffold loop is closed but the commitment to continual improvement is not (du-Toit-Brits et al., 2024).

Assessment Approach

Formative Assessment

Facilitator observation of data analysis and revision discussions

Summative Assessment

Final modified scaffold and coinciding rubric with student feedback tied to it

Collaborative Learning Assessment

Since learners will be using Google Docs, the tracked changes will park individual and group efforts. Along with this, student data that is shared was created using all educators data. There is not one specific data point, but a collaborative body of data generated by teachers committing to the scaffold practice individually. This individual effort is highlighted by the group data and accompanying analysis.

Critical Thinking Assessment

It’s important to remember that educators are professionals with a great deal of experience. Using basic guided discussion techniques like “What, Why, and How?” allows educators to create quality questions based on their interpretations of the data. Not everyone is going to have the same data point to discuss. Providing the framework for the questioning process but still allowing educators to discuss what they need with one another is a great way to assess their critical thinking informally.

Differentiation/Accommodation Strategies

Addressing Unique Learning Needs:

- Educators in teams whose summative timelines slipped past the 3-4 week window can still used the group data set to practice the analysis process and make modifications. There will likely be a couple of educators in this situation, but organizing them in their pre-established TCTs allows them to still benefit and contribute to the discussion without having their own data set.
- Facilitators will lean on groups that need more help with data analysis. Groups with a strong understanding will receive assistance as needed.
- A time-sensitive slideshow will follow learners as they move through the professional development with reference guides for learners at any level to use

Technology Accessibility Considerations:

Facilitator will provide laptops to educators without one, or will allow peers to share screens while working together. If educators need screen reader supports they will be implemented.

Implementation Notes

Potential Challenges and Solutions:

Not all the TCTs will finish their summatives on the same day so only giving 3 weeks for a turnaround might be too tight. The way this can be alleviated is by extending the date to 5-6 weeks, this almost completely ensures everyone finishes in time.

This also provides a solution to a different issue. As a facilitator, generating all of this feedback is a great deal of work. There needs to be a better way for the facilitator to export this data. I suggest sending an email two weeks before the session 2 date to all teachers asking them to export their data and upload it to the Google Script when they’re done inputting grades in the shared LMS. This way, educators can work at their own pace, and facilitators can focus on aggregating data as it comes in instead of searching for teachers to be done.

A final challenge will be unclear student data. Some students may not have strong responses, especially is the google form is administered after the summative or when they’re not in class. To solve this there are two possibilities. The first, teachers can be required to administer the google form as a short bell ringer the next day. This was students just focus on the summative at hand and come into class after they have mulled over the content. Another way to alleviate this is through facilitators mainly using numerical drop downs or sliding scales. Having students write short answers may cause task abandonment, leading to ineffective responses.

Alternate Approaches:

Some teams may fall heavily behind others during their redesign activity. Something that can be implemented is an extended session for groups who still need help. This can occur during designated TCT times so the groups that need more guidance can receive it without having to have another session.

References

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