

Using Digital Collaborative Learning Spaces in Blended Environments
with Adult Learners: An Action Research Plan

Karin N. Stateler

EDLD 5315

Lamar University

Using Digital Collaborative Learning Spaces in Blended Environments with Adult Learners: An Action Research Plan

Humans' work alongside machines is ever-changing. "While nearly 50% of all companies expect their full-time workforce to shrink by 2022 as a result of automation, almost 40% expect to extend their workforce generally, and more than a quarter expect automation to create new roles in their enterprise" (Cann, 2018). While machines will never replace humans, their ability to adapt to a rapidly-changing work environment is imminent. Companies need workers who can learn and adjust quickly, independently, and collaboratively. That is, adult learners need to value problem-solving and iteration over traditional corporate training methods. We need workers who can push innovation to the edges from the bottom up in every role (Ito, 2014). "I would like to introduce new approaches to working with the existing technology that we may push toward a paperless working environment. This means changing the environment in which we work to provide reskilling opportunities" (Stateler, 2021). To support reskilling of current employees, we must create environments for ongoing professional learning in face-to-face, blended, and virtual training opportunities.

Through my action research, I aim to provide and promote digital collaborative learning spaces in face-to-face, blended, and entirely virtual environments. I hope to contribute empirical research to determine the effectiveness of their implementation and use (Stateler, 2022). "My goal is to create a collaborative, professional learning network for administrators and their assistants to access intentionally curated resources that support district technology initiatives. This looks like intentional chat rooms using Google Spaces dedicated to supporting one another with technology questions. This also looks like intentional systems created around the use of Google Workspace, particularly Shared Drives and all the Google productivity applications"

(Lewis et al., 2021). I hope to find a correlation between the use of digital collaborative learning spaces and the number and kind of help desk tickets (Lewis et al., 2021). “Implications show that reskilling and upskilling current employees result in preparedness for the future of jobs. Finally, gains are made toward the evolution of a blended learning district by creating systems and modeling paperless expectations from administrators.” (Stateler, 2021).

Fundamental Research Question

The question I will explore is: To what extent will integrating digital collaborative spaces within and outside training environments change the number and type of help tickets that administrative assistants input into the system? One of my roles on my team is to support administration and administrative assistants in the district central office with technology use. I used to meet with them bi-weekly in a face-to-face format and through individual support. Recently, my team changed drastically. It shrank from eight teammates to just two. Therefore, we need to do our job more efficiently and cannot support any population as much with individual or face-to-face teaching and learning.

In any job, upskilling and reskilling are nearly continuous. Administrators and their assistants must rely on each other to do their jobs. Enter my action research plan. I cannot predict whether the number of help tickets will increase or decrease. However, I expect to see more differences in the type of help tickets as end users collaborate more effectively.

Summary of the Literature Review

In my literature review, I ask, “How might we effectively address the needs of adult learners in a constantly changing work environment?” (Stateler, 2022). The literature shows that adult learners need authentic learning environments that apply heutagogic practices. Heutagogy, defined as self-directed learning, is informal, practical, and personalized. The flexibility of

heutagogy meets learners where they are. As the needs of the workers change, so does their learning. While systemic changes in traditional PreK-12 classrooms create a challenge for implementation, these challenges are less common in the workplace (Stateler, 2022).

How can we implement heutagogy? The literature supports cooperative learning via the cloud and professional learning networks. The definition of cooperative learning is learners in “small groups working and learning together in a supportive manner to complete an assigned task” (Alansari & Rubie-Davies, 2021, p. 1). Learners support one another with the use of intentional strategies. While these strategies are known to use higher-order thinking skills, there are barriers to implementation, mainly with the drastic change in the role of the teacher (Stateler, 2022).

How do cloud computing and professional learning networks support collaboration for adult learners? Cloud learning, or collaborative learning using web infrastructure, allows learners easy access to retrieve and share information. Cloud-based applications such as Google Workspace allow synchronous working and interdependence. Knowledge is co-created to be temporary, evolving as time, space, and context require. This information further supports the development of 21st-century skills. Proper implementation is essential, however, to ensure that all learners’ needs are met (Stateler, 2022).

Professional learning networks provide another avenue for heutagogic, collaborative learning environments. Professional learning networks (PLNs) are defined as a “vibrant, ever-changing group of connections to which [members] go to both share and learn” (Crowley & Chaffey, 2014). PLNs provide users with connections, mastery, and a body of knowledge they might not otherwise access. Also, PLNs can be set up to address business-specific needs to manage critical tasks. The benefits of PLNs are, again, their flexibility upon implementation. The

most significant barrier is the lack of empirical research, to which I hope to contribute (Stateler, 2022).

The ultimate goal of collaborative learning practices for adult learners in heutagogic environments is to create a new culture of learning. Play, questioning, and imagination are at the heart of the new culture of learning (Thomas & Brown, 2011). Through this new culture of learning, we will address the constant changes to the work environment. In fact, this is our greatest hope for creating sustainable, equitable, and safe environments for working, learning, and living (Stateler, 2022).

Study Information

Research Design

My research methodology will include both qualitative and quantitative data. I will use a mixed-methods explanatory research design approach. For the quantitative research, I will use a correlational study.

By using explanatory mixed methods, I will focus on quantitative data first, then qualitative data. Because I'm seeking a specific number of help tickets compared to the use of digital collaborative learning spaces, my question lends itself to quantitative data. I can also quantify the types of help tickets by categorizing them and counting the numbers within each category. I plan to analyze the number and type of help tickets within the ZenDesk ticketing system before implementing heutagogic collaborative practices. I will repeat the process after implementing collaborative practices. I will compare this data to end-users use of digital collaborative learning spaces in face-to-face, blended, and virtual learning environments.

I hope to use the qualitative data to "shed further light on or explain more deeply the results of the primary analysis" (Mertler, 2019, p. 197). Using a correlational study for the

quantitative data, I can determine if a statistically significant relationship exists between the use of collaborative spaces and the number and kind of help tickets that collaborative space users input. Within the scope of the qualitative data, I intend to ask end users about their experience with training and their understanding and use of the collaborative learning environments. ([Appendix A](#)). I will use a combination of multiple choice, Likert scale questions, and open-ended responses.

Data Collection and Analysis

Collection

I will analyze help tickets before and after implementing digital collaborative learning practices with the administration and assistants in the district central offices. I will also examine the use of communal spaces to look for a correlation with the number and type of help tickets.

Quantitative Data

- Before implementing collaborative practices:

I will review all current central office employees' help tickets, including the number and kind. I will create categories of the types of help tickets, such as tickets that:

- are a result of systemwide outages
- require backend assistance that the end user could not have fixed on their own
- only required simple troubleshooting on the end user's side
- result in instructional technology support for the end user
- specifically request instructional technology support

- After implementing collaborative practices:

I will review employees' help tickets in the same manner as above from implementation to the current time.

I will also look at their attendance and usage of the following:

- Face-to-face group training with digital collaborative practices
- One-on-one technology support
- Blended learning training with digital collaborative practices
- Intentionally designed professional learning networks via Google Spaces

Qualitative Data

After implementing collaborative practices, I will ask end users to provide feedback about their experiences with digital collaborative learning spaces using the Google form in [Appendix A](#).

Analysis

Based on help tickets, I will analyze:

- How did the number of help tickets each person input change throughout the implementation of digital collaborative workspaces?
- How did the type of help tickets each person input change throughout the implementation of digital collaborative workspaces?

Based on user attendance and virtual learning space usage, I will analyze:

- How did the attendance and use of face-to-face digital collaborative spaces correlate with the number and kind of help tickets that end users input?
- How did the interactions within virtual learning spaces (PLNs) correlate with the number and kind of help tickets that end users input?

Based on the google form, I will analyze:

- User enjoyment of digital collaborative spaces.
- The value that users find in digital collaborative spaces.
- Passive vs. active use of virtual learning spaces.

- Additional user comments.

Timeline

August 2022

- Propose the implementation of digital collaborative spaces in face-to-face, blended, and virtual learning environments using the cloud and PLNs to
- Plan for implementation, including dates of training, communication, etc.

September 2022

- Complete pre-implementation help ticket data analysis
- Collaboration kickoff training:
 - Introduce the plan to the central office administration and their assistants
 - Face-to-face training
 - Newsletter
 - Discuss collaborative practices:
 - Face-to-face meetings
 - Blended training options
 - Digital learning spaces (PLNs)
- Post-training communication
- Set up digital collaborative learning spaces (PLNs)

October-December 2022

- Continue to hold monthly training sessions with collaborative practices
- Continue to communicate via the monthly newsletter
- Monitor digital collaborative learning spaces (PLNs)
- Support users with help tickets as requested

January 2022

- Get feedback from end users
 - Google form
- Data analysis
 - Help tickets
 - Attendance
 - Digital collaborative learning space (PLN) usage
 - Google form
- Look for failures and successes
- Reflect on the feedback and adjust
- Provide progress information to management
- Plan for the second semester with this information
- Reflect on how we could implement this information elsewhere throughout the organization

Sharing and Communicating Results

To begin, I plan to share this information with my team and department. In particular, I would like to share my findings with my digital learning teammate, my immediate supervisor, and her direct supervisors. This information will set the stage for implementing digital collaborative learning spaces on my team in other ways. I would also like to share this information with two leaders within my technology department, as we already heavily use digital collaborative spaces to communicate. My study will justify expanding their usage in other departments. Finally, I would like to share my findings with the central office administration and assistants. By sharing with all of these stakeholders, I hope to communicate that the implications

of this research are farther reaching than just the central office personnel. The technology department and central administration make district-wide decisions that can impact professional learning and blended learning. Finally, I hope to get helpful feedforward regarding how we can use this format in other departments, both on and off campuses.

Final Reflection

As I consider my plan to reflect on my action research, my mind fills with questions. For starters, is there an actual correlation between digital collaborative learning spaces and the number and kind of help tickets that end users input? I hope to see that users who frequented lunch and learn training and utilized the intentionally created Google spaces input fewer low-level tickets than they previously had. I also wonder what it might mean if there is no correlation or a negative relationship. My next question is, how well did I implement collaborative learning? I aim to use the influencer skills we learned in early coursework. However, I know that the daily grind will pose a threat to my plan. Therefore, I will question the benefits and barriers to implementing collaborative learning spaces in my particular setting. I will take this information to consider what I can change as I move forward with this information.

How can we apply this beyond the central office? I predict that digital collaborative learning spaces will apply to students and adult learners. I would like to test their use in supporting paperless practices and the development of the knowledge collective. Finally, I want to see how we can apply what I learned as one piece of the puzzle with blended and 21st-century learning practices.

References

- Alansari, M., & Rubie-Davies, C. M. (2021, June 23). Enablers and Barriers to Successful Implementation of Cooperative Learning through Professional Development. *Education Sciences, 11*(7), 1-18. <https://files.eric.ed.gov/fulltext/EJ1303852.pdf>
- Cann, O. (2018, September 17). Machines Will Do More Tasks Than Humans by 2025, but Robot Revolution Will Still Create 58 Million Net New Jobs in Next Five Years. The World Economic Forum. Retrieved July 22, 2022, from <https://www.weforum.org/press/2018/09/machines-will-do-more-tasks-than-humans-by-2025-but-robot-revolution-will-still-create-58-million-net-new-jobs-in-next-five-years/>
- Crowley, B., & Chaffey, S. (2014, December 31). *3 Steps for Building a Professional Learning Network (Opinion)*. Education Week. Retrieved July 5, 2022, from <https://www.edweek.org/leadership/opinion-3-steps-for-building-a-professional-learning-network/2014/12>
- Ito, J. (2014, July 7). Joi Ito: Want to innovate? Become a "Now-ist." TED. Retrieved July 22, 2022, from https://www.ted.com/talks/joi_ito_want_to_innovate_become_a_now_ist/up-next?language=en
- Lewis, S., Purvis, K., & Stateler, K. (2021). Publication Rough Draft. Karin Stateler, Cookies N Cache. Retrieved July 22, 2022, from https://karinstateler.com/?page_id=1176
- Mertler, C. A. (2019). *Action Research: Improving Schools and Empowering Educators*. SAGE Publications.
- Stateler, K. (2021). *My Proposal*. Karin Stateler, Cookies N Cache. Retrieved July 22, 2022, from https://karinstateler.com/?page_id=95

Stateler, K. (2021, November 28). *An Analysis of the Paperless Office: A Literature Review*.

Karin Stateler, Cookies N Cache. Retrieved July 22, 2022, from

https://karinstateler.com/?page_id=93

Stateler, K. (2022, July 8). *Literature Review*. Karin Stateler, Cookies N Cache. Retrieved July

22, 2022, from https://karinstateler.com/?page_id=1180

Thomas, D., & Brown, J. S. (2011). *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change*. CreateSpace Independent Publishing Platform.

Appendix A

[Collaborative Learning Spaces: Post-Implementation Feedback Form](#)