Shirer, K. A., Croymans, S., and Hering, A.H. (2020). A conceptual framework for applying distance learning theories to Family and Consumer Sciences distance education during the COVID-19 pandemic. *Unpublished paper.*

Abstract:

COVID-19 moved Military Family Service Providers (MFSPs) and Extension educators (EEs) to almost completely working in virtual learning and networking environments. Learning theories provide valuable guidance for developing effective virtual family education and engagement (FEE). This paper's aim is to apply a distance education (DE) learning theory conceptual framework to managing COVID-19-related changes for family education and engagement. Three groups of learning theories — behavioral/cognitive, social cognitive/constructivist, and connectivism — were synthesized into key principles and best practices for improving virtual learning events. Implications for practice during the COVID-19 pandemic and beyond are discussed.

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NOTE: This paper was originally written to describe a process evaluation of the MFLN Family Transitions (FT) area. The framework was developed and used to assess the level of learner engagement in the area's webinars and wrap-around resources and to guide program improvements. With the changes brought on by the pandemic, the FT team members believed that MFSPs and EEs could benefit from our experience.

Key Points in the Unpublished Paper:

- COVID-19 has changed the manner in which MFSPs and EEs work with military families from an in-person environment to primarily a virtual one.
- Table 1 summarizes the findings from a review of theoretical and empirical research on distance education learning theories (DELT). The table serves as a guide for MFSPs and EEs to apply DELT to their virtual family education and engagement.
- Applying DELT through the lens of the Community of Inquiry model with its emphasis on social presence helps to keep the emphasis on engaging the learner (Garrison et al., 2010). This is especially important due to the isolation and stress caused by the pandemic.
- The framework has broader application to partnering and networking with others and working with learners in one-on-one, small group and large group virtual settings.
- The authors found social cognitive and constructivism the most used approach to virtual education and engagement. Yet, all three groups of DELT have potential application to family education and engagement. For example, the behavioral-cognitive DELT, which is teacher-driven and heavily uses lecturing, can help a practitioner create high-quality digital products for use in virtual engagement and education. The authors also were uncertain about the application of connectivism to their work but found it useful for small groups of adult

learners who wanted to direct their own learning with guided facilitation. Each theory has its purpose and builds upon each other in the framework.

- The organization within which practitioners work will provide both assets and limits to what can be achieved in virtual family engagement and education. Assets or limits might include organizational culture, access to high-quality hardware and software, leadership support, fiscal resources, or technology support. MFSPs and EEs will likely face constraints in achieving their goals for family education and engagement. They will need to navigate these constraints to be as effective as they can within them.

In conclusion, working in a virtual environment requires adaptation and innovation no matter what one's level of expertise and experience. The pandemic is changing not only how we work but the content of our work in ways that are not yet even known or fully understood. Nimbleness and openness to change will be required of MFSPs and EEs now and in the future.

Table 1. Framework of distance education learning theories for Family and Consumer Sciences

Community of Inquiry Presences	Behavioral and Cognitive	Social Cognitive and Constructivism	Connectivism
Teacher Presence Achieved through instructional design, facilitating discourse, and direct instruction	"Drives learning" Design, delivers and assesses learning Set objectives, content and learning activities Relies on lecture and other one-way communication approaches	"Guides learning" Scaffolds learning activities for interaction Uses "triggering" activities to launch learning Facilitates discussion activities	"Facilitators & coaches" Leads by example – does not tell Needs a charismatic facilitator that people want to follow Creates the conditions for self-directed learning
Content Presence Focus topic or interest, exploring ideas, connecting and applying	Determined by teacher and/or expert Informed by research Scripted by content expert Assumes knowledge leads to learner change	Less content and more social interaction (50/50) Identify content with learners Assumes more interaction leads to more learning	Learner determines the content Focus on developing network literacy skills that are applied to solving learners' practical problems Assumes learners are able to identify needed content
Social Presence Encourages open communication, group cohesion, and emotional expression	Learner viewed as an empty bucket to be filled Learner watches, listens and reads – passive Low or social interaction	More active learning and use of discussion Sustained communication throughout learning Includes thought-provoking questions, case examples and problem-solving	Learner identifies goals and connects with others to reach them Information retrieval skills and self-direction are critical

Best Practices	Start here if new to distance education Focus on creating well-designed and planned presentations Learn about your audience technology use and learning needs Practice the event, including the technology, prior to the event Work within your technology capabilities and skills	Continue with previous theories' best practices Push yourself to reduce content and add interaction Scaffold or build in social interaction throughout the event Use chat and polls to aid discussion Avoid the temptation to take over the event with lecturing Limit the number of participants to allow for more meaningful interaction	Continue with previous two theories' practices Find a mentor to guide you in learning how to use connectivism Acquire high-quality, current technology to support network building Consider this approach for small-group (4-5 people) or individual projects. Acknowledge the approach doesn't fit everyone's personality Develop the facilitation skills to support the project and recognize that facilitation is key

Anderson & Dron, 2011; Garrison et al., 2010; Picciano, 2017; van Schie 2008.

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References

Anderson, T. & Dron, J. (2011). Three generations of distance education pedagogy. The International Review of Research in Open and Distributed Learning, 12(3), 80-97. https://doi.org/10.19173/irrodl.v12i3.890

Better Evaluation. (n.d.). Describe the theory of change. Website. Retrieved from https://www.betterevaluation.org/en/node/5280

Garrison, D. R., Anderson, T., & Archer, W. (2010). The first decade of the community of inquiry framework: A retrospective. The Internet and Higher Education, 13 (1-2), 5-9. https://doi.org/10.1016/j.iheduc.2009.10.003

Goldie, J. (2016). A knowledge learning theory for the digital age? Medical Teacher, 38 (10), 1064-1069. https://doi.org/10.3109/0142159X.2016.1173661

Harden, R. M., Gessner, I. H., Gunn, M., Issenberg, S. B., Pringle, S. D., & Stewart, A. (2011). Creating an e-learning module from learning objects using a commentary or 'personal learning assistant'. Medical Teacher, 33 (4), 286-290. https://doi.org/10.3109/0142159X.2011.557104

Hering, A., Croymans, S., McCann, E., Bertsch, R., Jeanette, K., Katras, M.J., & LaFollette, V. (2017, July 27). "Wrap-arounds: Engaging Learners & Building Learning Communities". Speed Session at University of Wisconsin - Madison 33rd Annual Distance Teaching & Learning.

Kay, D., & Kibble, J. (2016). Learning theories 101: application to everyday teaching and scholarship. Advanced Physiology Education, 40, 17-25. https://doi.org/10.1152/advan.00132.2015

Masten, A., Walsh, F. & Ungar, M. (2019, August 20-27). Resilience series. (Webinar). Military Families Learning Network. Retrieved from https://militaryfamilieslearningnetwork.org/resilienceseries/

Military Families Learning Network. (2018, September 18-20). Virtual Conference: Cultural competency. [Webinar]. Retrieved from https://militaryfamilieslearningnetwork.org/event/mflnvc2018/

Military Families Learning Network. (2019, September 17-19). Relationships for readiness: MFLN Virtual Conference 2019. [Webinar]. Retrieved from https://militaryfamilieslearningnetwork.org/event/vc2019/

Picciano, A.G. (2017). Theories and Frameworks for Online Education: Seeking an Integrated Model. Online Learning, 21(3), 166-190. Retrieved September 3, 2019 from https://www.learntechlib.org/p/189520/

Plein, C. & Cassels. A. (2019). The Military Families Learning Network: A model for Extension-based virtual communities. Journal of Extension, 57(6). Retrieved from https://www.joe.org/joe/2019december/a5.php

Shirer, K. & Wohffeil, T. (2015). Building resilience during change — finding courage within. [Webinar]. Military Family Learning Network Family Transitions. https://militaryfamilieslearningnetwork.org/event/29502/

Siemens, G. (2017). Connectivism: A learning theory for the digital age. In R. West (Ed.), Foundations of Learning and Instructional Design. Retrieved from https://lidtfoundations.pressbooks.com/chapter/connectivism-a-learning-theory-for-the-digital-age/

Stepper, J. & London, J. (2016). Working Out Loud. Training & Development, 43(1), 6-8.

Streams, S. (2016, June14). 36 tips for making webinars that don't' stink. OCLC Next. Retrieved from http://www.oclc.org/blog/main/36-tips-for-making-webinars-that-dont-stink/

Utecht, J. & Keller, D. (2019). Becoming Relevant Again: Applying Connectivism Learning Theory to Today's Classrooms. Critical Questions in Education, 10 (2), 107-119. Retrieved from https://files.eric.ed.gov/fulltext/EJ1219672.pdf

van Schie, J. (2008). Concept map of Community of Inquiry. PDF. Retrieved from https://coi.athabascau.ca/wp-content/uploads/2020/06/concept-map.pdf

Wegerif, R. (1998). The social dimension of asynchronous learning. Journal of asynchronous learning networks, 2(10), 34-49. Retrieved from https://www.researchgate.net/profile/Rupert_Wegerif/publication/228598781_The_Social_Dimension_of_Asynchronous_Learning_Networks/links/09e415124c0b8ebadf000000.pdf

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