

**EngageLearnSuccess™ Model for Distance Learning in Higher Education**

**Paula L. Smith**

**Department of Learning Technologies: University of North Texas**

**LTEC 6040: Theory And Practice of Distributed Learning**

**Dr. Warren Scott**

**July 16, 2023**

### **Abstract**

Online education has grown in popularity in recent years. Due to a digital world that includes mobile devices, virtual learning systems, online courses, and digital textbooks, lectures and seminars are now more complete than the constraints of a classroom. There are many distance educational models, but there seems to be a lack of evidence-based models to provide effective teaching and learning. One reason is that higher education institutions need to comprehend the real problems that online learning faces regarding social, teacher presence, and cognitive to produce an in-depth and meaningful learning experience. Using a multi-strategies approach, we will propose the EngageLearnSuccess™ (ELS) model in its initial stage. The learning design thinking process will be our structure to frame the problematic issues with distance learning. The Grounded Theory analysis qualitative research design aims to provide evidence-based treatments in three crucial areas of the ELS model: engagement, learning, and success factors. The study aims to develop a multi-strategy model for distance education that promotes effective learning, student involvement, motivation, and academic performance.

*Keywords:* distance education; distributed learning; online teaching and learning; engagement; learning; success; academic achievement;

### **EngageLearnSuccess™ Model for Distance Learning in Higher Education**

Times have evolved from the historical beginnings of distance learning in 1728 by a teacher advertising in the Boston Gazette to having numerous lessons of learning art supplied to those weekly who lived in Boston (Sleator, 2010). However, commercial correspondence courses took off at the beginning of the twentieth century, when the modern postal service was constructed (Sleator, 2010). Currently, in the 21st century, students benefit from the flexibility provided by distance educational courses and programs. Online learning has increased in recent years. Lectures and seminars are now more comprehensive than the confines of a classroom due to a digital landscape that includes mobile devices, virtual learning systems, online courses, and digital textbooks.

According to the National Center for Education Statistics (2022) report, Seventy-five percent (11.8 million) of all undergraduate students enrolled in at least one remote education course in the autumn of 2020, and 44 percent (7.0 million) took only distance education courses. Compared to the previous fall before the epidemic, 11.8 million vs. 6.0 million undergraduate students enrolled in at least one online education course jumped by 97 percent in 2020 (National Center for Education Statistics, 2022). The percentage of students enrolled in remote education courses in postsecondary institutions in the autumn of 2021 was 59%, according to data analysis from 5,831 institutions (National Center for Education Statistics, 2022). The demand for distance learning is rising; higher education must have adequate and strategic models to have successful learning programs. This study aims to introduce a multi-strategy model for distance education that promotes effective learning, student engagement, motivation, and academic success.

#### **Distance Education Learning, what does it mean?**

Online education, distance learning, web-based instructional, virtual schools, e-learning, and online learning are all phrases used interchangeably to describe today's extensive and

changing non-traditional teaching (Kusmaryono et al., 2021; Power, 2007). According to the researchers, distance learning is via an internet-based interactive model and a learning management system (Kusmaryono et al., 2021). Distance education is formal institution-based education in which the learning system is separated by distance and time. An interactive communication system connects students, resources, content, and teachers/instructors via learning management systems (Kusmaryono et al., 2021).

Online learning is proving to be a cost-effective and flexible way of reaching off-campus and on-campus students as institutions actively seek outreach initiatives to broaden the availability of higher education to various groups of new and returning students (Power, 2007). Distance education's biggest attraction is the learner's flexibility when they face strong constraints on where and when they complete their coursework (Kusmaryono et al., 2021; Mahlangu, 2018; Miller, 2014; Power, 2007). Universities can benefit from distance learning because it adds flexibility to the learning process through technology and various approaches to teaching and learning (Mahlangu, 2018).

Learners are frequently constrained to provide for their families or need to work to stay afloat financially while obtaining their degree when off from work (Miller, 2014). It is even better when they can apply the knowledge they are learning in their current job setting (Mahlangu, 2018). Gen X, Y, and Z were practically born into digital learning as they watched their parents lay an iPad or smartphone beside them while playing a lullaby song. Today's learners expect or require technology from social connections or collaboration across various social media sites. Rapid communication, frequent feedback, and ongoing access to guidance and support are made possible by technological improvements, where they can assess their syllabus, assignments, discussion forums, and email or chat with their instructor (Miller, 2014).

### **Problems with Distance Education Models**

Distance education has no perfect model, but educators should strive for a conceptual view of an evidence-based and measurable distance learning model to attain learning outcomes. One of the most challenging aspects of distance education is that most instructors have no practical experience with this form of teaching (Fojtik, 2018). Distance students struggle as a result of this. The article by Fojtik (2018) discusses that instructors must produce high-quality teaching materials and adjust and adapt their teaching approaches. Another critical issue is helping students construct knowledge by self-regulating themselves in distance education. Distance learning is complex for students, and the most severe problem is how well students can handle their coursework. A fraction of students need help to plan a well-balanced learning schedule (Fojtik, 2018; Sleator, 2010). Many teachers feel they can use the same pedagogical and educational approaches as full-time educators (Fojtik, 2018).

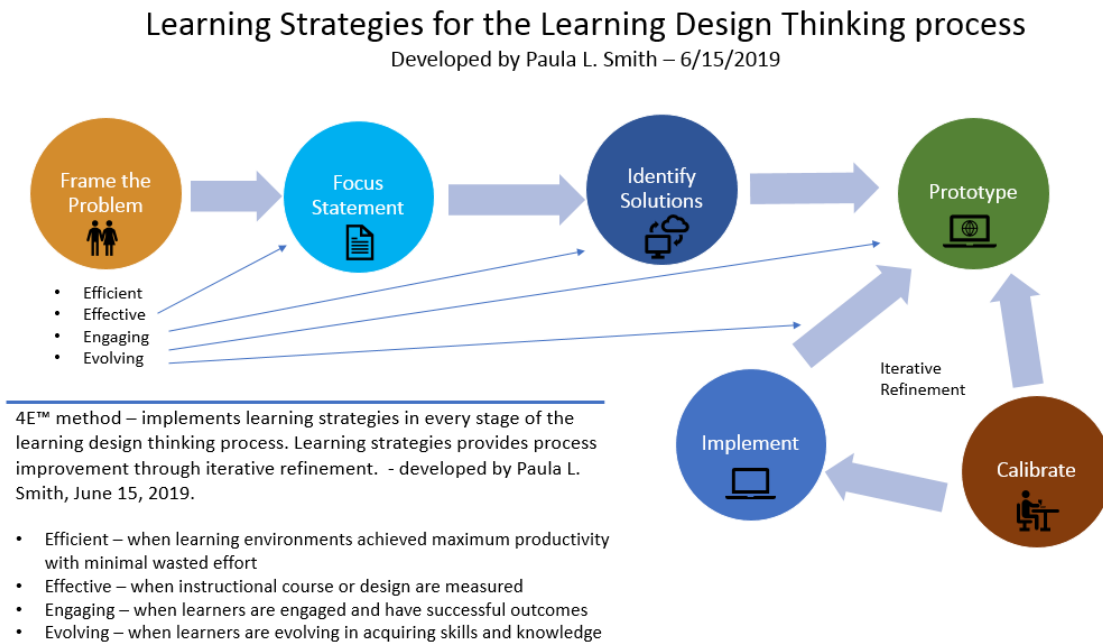
Other challenges are limited contact with the instructor or other students, which causes students to isolate (Fojtik, 2018; Sleator, 2010). The ability to self-regulate learning, effectively manage time, and maintain motivation to study for the course (Fojtik, 2018). According to the Mahlangu (2018) article, there is growing concern that some learners who study remotely are disadvantaged due to different issues with technology access, particularly in foreign nations. Students may drop out of higher education because their employers make it harder for them to study, such as by forcing them to work overtime and students requiring more time to learn (Mahlangu, 2018).

### **Background on Proposed EngageLearnSuccess™ Model**

The EngageLearnSuccess™ model derived from a seminal construct of the learning strategies for the Design Thinking Process paper presented at the University of Maryland Global Campus on June 15, 2019. See Figure 1. It was part of the advanced practicum in the Learning

Design course and was used in their Learning Technologies program. The learning design thought process is a systematic method by which a learning designer or design team investigates instructional difficulties, strategizes creatively, and solves problems using new solutions. Design Thinking is an educational model that is part of the larger project-based learning model. It teaches problem-solving through a creative and systematic approach. When creating a new model, it is necessary to have a path to an innovative concept based on learning theories or ideas.

**Figure 1**



**Theoretical Framework**

The ELS model's theoretical framework will comprise a multi-strategies approach to a new recommended model for distance education. The multi-strategies process will allow for the ELS model to adapt to any distance education program, not just in higher education. The fundamental theoretical framework builds upon the learning design thinking process, learning sciences and theories, and learning strategies to implement a holistic model approach to distance education. It will comprise the Learning Design Thinking Process, Grounded Theory, Cognitive

Load Theory, Community of Inquiry Theory, Social Presence Theory, and Effectivity of Online Teaching Materials.

The learning design thinking process works through discovery, ideation, experimentation, and evolution to find new methods for challenging issues. According to the Luka (2020) report, design thinking draws two primary sensibilities from the design process: abductive reasoning and human-centeredness. What exactly is abductive reason? This type of logical reasoning seeks the most straightforward and likely conclusion given a set of observations (Luka, 2020). Many actions are included in the learning process, including observation, collaboration, fast-gaining knowledge, idea visualization, and rapid prototype development (Adams & Nash, 2016; Luka, 2020). A new model can be developed through this seminal construct to promote effective learning, student engagement, motivation, and academic achievement through various factors.

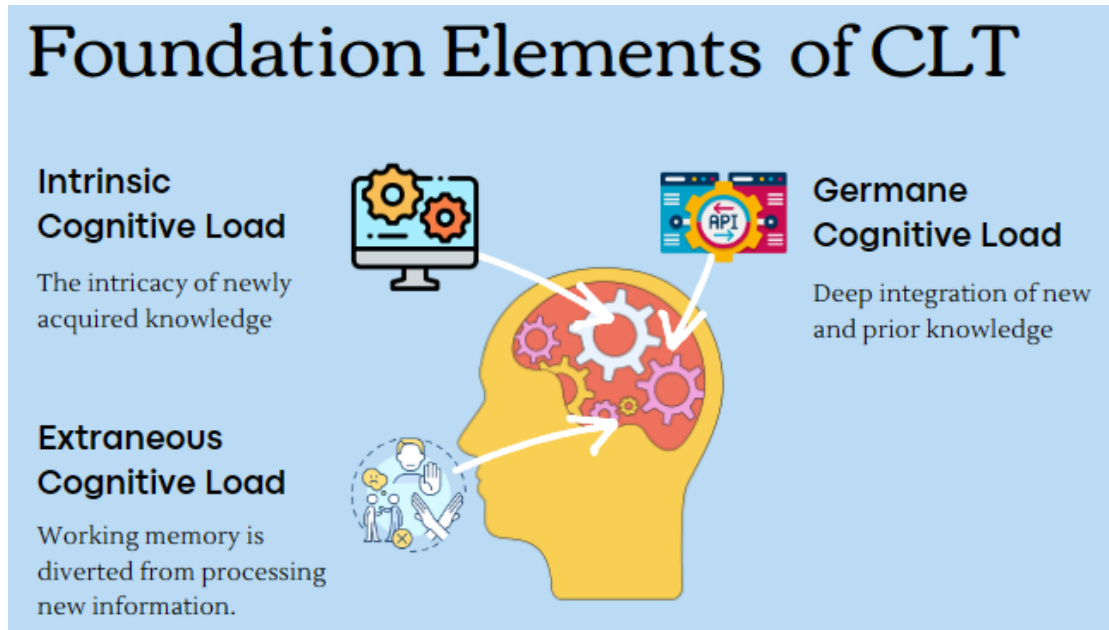
Grounded theory is a research method that includes developing a theory from data that has been methodically collected and analyzed. It is frequently employed in qualitative research to investigate social processes and interactions. According to Miller (2014), it is commonly used to comprehend the experiences of students who learn online. The researcher gathers new data and compares it to emergent patterns in the data, a process known as continual comparison. In the initial coding stage, the data is segmented into several categories as the theory begins to shape (Miller, 2014). The ongoing comparison allowed the researchers to constantly reformulate their thoughts and theories while developing a new idea or concept (Miller, 2014).

As we develop engagement, learning, and evaluation learning mechanisms for the model, the cognitive load theory will assist us in mitigating cognitive overload. A student has limited mental resources to dedicate to a task during learning. According to Cognitive Load Theory (CLT), instructional design formats can overburden students and hinder successful learning

(Duran et al., 2022). The goal should be to reduce external stress to the greatest extent possible to optimize available capacity for improved learning outcomes and transfer performance.

Intrinsic, extrinsic, and relevant cognitive loads cause CLT. Approaches to instruction can influence working memory brain processes (Duran et al., 2022). See Figure 2.

**Figure 2**



Community of Inquiry Theory symbolizes developing three interdependent elements - social, cognitive, and teaching presence - to create an in-depth and meaningful learning experience. The Ke (2010) article reports on the Community of Inquiry (CoI) framework for teaching practical, engaging courses, which includes a teaching presence component. Social and cognitive presence are also essential components. The design, facilitation, and direction of mental and social processes to generate personally meaningful and educationally worthwhile learning results is called teaching presence (Ke, 2010). The CoI will be the foci of the derived new model as it captures important data and concepts for engagement, learning, and success strategies.



The Social Presence Theory is physical proximities produced by various media, the two most common media being face-to-face contact and online engagement, constitute Social Presence Theory (Weidlich et al., 2022). In the article by Weidlich et al. (2022), social presence relates to the degree to which the other person plays a role in communication. The ability to project physical and emotional presence and experience it from others in encounters is utilized to assess social presence (Weidlich et al., 2022). Weidlich et al. (2020) propose two contextual explanatory factors to help develop a more developed social presence theory. The first variable, social presence divergence, connects students' experiences to their preferences to measure the right amount of social presence in an online learning environment. The second component, interaction integration, considers the importance of social interaction in the learning setting (Weidlich et al., 2022).

The effectiveness of online teaching materials must be innovative to the level of relevancy when integrated with online pedagogies that can improve the quality of student learning. Effective online instruction is predicated on well-designed course content, motivated interaction between the teacher and learners, well-prepared and fully-supported instructors, establishing an online learning community, and rapid technological advancement (Sun & Chen, 2016). Teaching interesting resources will make learning more enjoyable, instructive, and persuasive (Sukardi et al., 2019).

### **Methods**

In the research design for the proposed ELS model, the grounded theory analysis technique is used (Miller, 2014); since 2007, various published papers and research on online teaching and learning have been reviewed in this study., focusing on how theories, practices, instructional materials, and assessments apply to the online learning environment. These articles

were placed in a thematic way to address engagement, learning, and success factors for online learning.

### Results

The recommended solution for ELS is a model for successful distance learning. It focuses on engaging students with interactive content, promoting active learning, and supporting student success. The success factors for distance learning are providing a positive learning environment and encouraging students to participate in class. Instructors must facilitate or guide students to self-regulate their education by taking ownership, completing assignments, and seeking help from the instructor or teacher's assistant. Another critical factor is driving the students to set goals, track their progress, and celebrate discussions and achievements to motivate them. Review the findings of principles for engaging, learning, and success strategies. See Table 1.

**Table 1**

Learning Strategies	Principles	Articles
<b>Engage</b>	<ul style="list-style-type: none"> <li>• Use interactive technologies to facilitate communication and collaboration between students and instructors.</li> <li>• Incorporate real-world examples and case studies to connect course material to students' experiences.</li> <li>• Provide collaborative learning opportunities for students to give feedback and participate in discussions.</li> <li>• Establish an online learning community.</li> </ul>	Cacault et al., 2019; Croft et al., 2010; Ke, 2010; Kireev et al., 2019; Kusmaryono et al., 2021; Mahlangu, 2018; Miller, 2014; Power, 2007; Sleator, 2010; Sukardi et al., 2019; Weidlich et al., 2022
<b>Learn</b>	<ul style="list-style-type: none"> <li>• Set clear learning objectives for each lesson.</li> <li>• Effective and structured curriculum.</li> <li>• Balance the cognitive load.</li> <li>• Choose appropriate technology tools for the lesson.</li> <li>• Use active learning strategies to engage students.</li> <li>• Regular formative and summative assessments.</li> <li>• Incorporate elements of personalized learning by providing options for students.</li> <li>• Establish effective communication channels to encourage student-teacher interaction and support.</li> </ul>	Duran et al., 2022; Fojtik, 2018; Ke, 2010; Kireev et al., 2019; Kusmaryono et al., 2021; Mahlangu, 2018; Miller, 2014; Power, 2007; Sleator, 2010; Sukardi et al., 2019;

<p><b>Success</b></p>	<ul style="list-style-type: none"> <li>• Utilize learning analytics to gather student engagement, performance, and progress data.</li> <li>• Regularly review and improve the ELS model based on feedback and assessment results.</li> <li>• Provide comprehensive student support services.</li> <li>• Provide ongoing training and technical support.</li> <li>• Offer ongoing professional development opportunities for instructors.</li> <li>• Distance education in higher education requires strategic, operational, and assessment planning.</li> <li>• Conduct research and evaluation studies to assess the effectiveness of the distance education model.</li> </ul>	<p>Ke, 2010; Kusmaryono et al., 2021; Mahlangu, 2018; Miller, 2014; Power, 2007; Sleator, 2010; Sukardi et al., 2019; Warren &amp; Churchill, 2022</p>
-----------------------	---	--

**Conclusion**

The research was good due to constraints on time, and the study's article selection was limited. However, it can be expanded to assess more articles based on the learning methodologies. Several learning strategies were coded into themes to aid in developing the EngageLearnSuccess™ model. Designing an effective distance education model requires a combination of pedagogical competence, technology infrastructure, ongoing evaluation, and iterative development refinement to satisfy success factors. The EngageLearnSuccess™ model is for successful distance learning with a holistic approach.

### References

- Adams, C., & Nash, J. B. (2016). Exploring design thinking practices in evaluation. *Journal of MultiDisciplinary Evaluation*, 12(26), 12-17. <https://doi.org/10.56645/jmde.v12i26.434>
- Cacault, M. P., Hildebrand, C., Laurent-Lucchetti, J., & Pellizzari, M. (2019). Distance learning in higher education: Evidence from a randomized experiment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3390288>
- Croft, N., Dalton, A., & Grant, M. (2010). Overcoming isolation in distance learning: Building a learning community through time and space. *Journal for Education in the Built Environment*, 5(1), 27-64. <https://doi.org/10.11120/jebe.2010.05010027>
- Duran, R., Zavgorodniaia, A., & Sorva, J. (2022). Cognitive load theory in computing education research: A review. *ACM Transactions on Computing Education*, 22(4), 1-27. <https://doi.org/10.1145/3483843>
- Fojtik, R. (2018). Problems of distance education. *International Journal of Information and Communication Technologies in Education*, 7(1), 14 - 23. <https://doi.org/10.2478/ijicte-2018-0002>
- Gerber, H. R., Abrams, S. S., Curwood, J. S., & Magnifico, A. M. (2016). *Conducting qualitative research of learning in online spaces*. SAGE Publications.
- Ke, F. (2010). Examining online teaching, cognitive, and social presence for adult students. *Computers & Education*, 55(2), 808-820. <https://doi.org/10.1016/j.compedu.2010.03.013>
- Kireev, B., Zhundibayeva, A., & Aktanova, A. (2019). Distance learning at higher education institutions: Results of an experiment. *Journal of Social Studies Education Research*, 10(3), 387-403.

- Kusmaryono, I., Jupriyanto, J., & Kusumaningsih, W. (2021). A systematic literature review on the effectiveness of distance learning: Problems, opportunities, challenges, and predictions. *International Journal of Education*, 14(1), 62-69.  
<https://doi.org/10.17509/ije.v14i1.29191>
- Luka, I. (2020). Design thinking in pedagogy. *Journal of Education Culture and Society*, 5(2), 63-74. <https://doi.org/10.15503/jecs20142.63.74>
- Mahlangu, V. P. (2018). The good, the bad, and the ugly of distance learning in higher education. *Trends in E-learning*. <https://doi.org/10.5772/intechopen.75702>
- Miller, M. D. (2014). *Minds online: Teaching effectively with technology*. Harvard University Press.
- National center for education statistics. (2020). *The SAGE Encyclopedia of Higher Education*. <https://doi.org/10.4135/9781529714395.n400>
- Power, M. (2007). From distance education to e-learning: A multiple case study on instructional design problems. *E-Learning and Digital Media*, 4(1), 64-78.  
<https://doi.org/10.2304/elea.2007.4.1.64>
- Ravitch, S. M., & Carl, N. M. (2019). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. SAGE Publications.
- Sleator, R. D. (2010). The evolution of Elearning *Background, blends and Blackboard .... Science Progress*, 93(3), 319-334.  
<https://doi.org/10.3184/003685010x12710124862922>
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15, 157-190.

Warren, S. J., & Churchill, C. (2022). Strategic, operations, and evaluation planning for higher education distance education. *Distance Education*, 43(2), 239-270.

<https://doi.org/10.1080/01587919.2022.2064821>

Weidlich, J., Göksün, D. O., & Kreijns, K. (2022). Extending social presence theory: Social presence divergence and interaction integration in online distance learning. *Journal of Computing in Higher Education*. <https://doi.org/10.1007/s12528-022-09325-2>