

Micro-credentials and work skills development for adult victims of domestic abuse: An illustrative case study.

Terry M. McGovern, D.M.
Doctorate of Business Administration candidate
University of South Florida

Abstract

Administrators and faculty of the University of Wisconsin-Extension's (UWEX) University Learning Store (ULS) recognized micro-credentials were becoming a vital learning pathway for adult students. They expected the learning applications to be useful to many types of working adults focused on developing relevant job skills and earning micro-credentials (badges) through summative, authentic assessments as proof of learning. Identifying the importance of work skills development for their clients, Madison Wisconsin's Domestic Abuse Intervention Services (DAIS) viewed the ULS as a technological solution for victims of abuse utilizing DAIS services and seeking work skills development. The micro-credentials could play a key role in helping victims of violence to improve work skills and hence increase job placement rates, crucial to economic self-sufficiency and independence from their abusers.

In this article, andragogy, adult learning theory, is highlighted. The case begins with an overview of andragogical assumptions underlying adult learner theory. Next, a relationship is established between micro-credentialing and the andragogical model of learning. Following this is an overview of the University Learning Store, DAIS, and their collaborative project. Finally, the case concludes by addressing challenges with micro-credentialing in higher education, recommendations for improving the ULS, and suggestions for future research.

Andragogy

Adults learn differently than adolescents. Although the term pedagogy is often used to describe the general method and act of teaching its word origin suggests something more specific than a general act. Knowles (1973), posits the notion of pedagogy comes from the same stem as pediatrics. The Greek words *paid* and *agogus* means *child* and *leader of* respectively. Holmes and Abington-Cooper (2000) note that virtually all studies of learners before the mid-1960's assumed learning and teaching theories worked equally well for adults and children and most educational research during this time centered on learners aged 6-21 years old.

Knowles (1973), as well as other educational research scholars, began questioning the rationality of pedagogical suppositions in the 1950's and 1960's (Bower and Hollister, 1967; Bruner, 1961; Erikson, 1950; Getzels & Jackson, 1962; Iscoe & Stevenson, 1960; White, 1959). Eventually, the term andragogy, *aner* meaning *man*, became widely used by educational scholars to refer to the methods and acts of teaching adults. Knowles acknowledges that this term was not new among European scholars, Germans had used it since 1833. Andragogical scholarly research and related insights, however, began appearing in the literature in the mid-20th Century with Knowles' pioneering work at the forefront.

Knowles (1990) argues there are six fundamental assumptions which serve as the foundation of the andragogical model. The first of these is the need to know. Adults are less likely to engage in learning unless they understand the advantages gained by comprehending something new or the disadvantages of not knowing. It is essential for educators to convey a value proposition of what they are imparting to help mature learners understand why they should learn the material.

The second assumption is adults have an independent sense of self-concept. Adults view themselves as being accountable for their own choices and their own lives. This is different for young learners who are dependent upon the teachers and others (e.g. parents, coaches, administrators) for direction. As people mature they become more self-directing. A challenge for adult learners, according to Knowles (1990), is their previous schooling has conditioned them to behave in a dependent manner when presented with activities labeled as training or education. Educators should design learning encounters to assist adults in making the transition from dependent to autonomous learners.

Knowles (1990) third assumption posits the amount and types of experiences adults bring into the class setting are very different compared to younger learners. Because of this, groups of adult students will have much higher variety regarding their circumstances, how they learn, the incentive to understand, the necessity to learn, benefits from studying, and goals they hope to achieve from a scholastic experience. The profound experiences of adults also serve as an excellent resource for knowledge. Hence peer-to-peer learning activities are relevant. Knowles clarifies that experiences to children center on something that happens to them whereas, for adult pupils, experience represents who they have become as a person. Hence to ignore student experience in adult education is likely to be perceived as not just rejecting their experiences but also rejecting them as individuals.

The fourth assumption by Knowles (1990) argues that adult students develop a readiness to learn based on things they need to know and skills they need to be able to do to manage their current circumstances. The timing of the learning is the significant facet of this assumption. Entry-level workers are not ready for a class on enterprise-level planning until they understand their current job-level planning. Commonly, they need not comprehend strategic planning until promoted to a level where they directly participate in enterprise-level planning.

Orientation to learning is the fifth assumption under the andragogical model of learning (Knowles, 1990). In the school setting, early learners' orientation to learning is subject centered. For adult learners, however, their orientation is more life-centered. Adults are more likely to be enthusiastic about learning if they feel a new knowledge helps them accomplish a chore or solve a problem. Hence course content and design, from course readings to class organization, should focus on the context of how the adult will apply the learning to real-life scenarios.

Knowles' (1990) final assumption emphasizes motivators for adult learners. Adults respond well to external motivators such as work promotion, job change, better pay, etc. Even more powerful are internal motivators such as the desire for enriched job fulfillment, self-esteem, quality of life, etc. Educators need to consider these motivators and may be able to leverage them to remind students when their motivation to learn appears depleted.

Knowles (1990) six assumptions of adult learners might explain, in part, the rapid proliferation of micro-credentialing throughout the global higher education industry. Badging, the use of digital icons to represent knowledge and skill achievements, aligns well with the andragogical model. The digital images shown across a range of social media satisfies adults need to know as the exhibiting of the credential has value with potential employers. Many of the micro-credentials occur online, are self-paced, and center on mastery of knowledge instead of being confined to a time limit such as a quarter or semester. Hence students pursuing badges are highly self-directed. Some badges, such as some of the offerings by the University Learning Store (ULS), a collaborative involving several universities and managed by the UWEX, require students to consider subjective experiences as part of the assessment process. Other schools are capturing a student's experiences outside of the class setting (e.g., leadership badge for being a sports team captain or manager at work) and acknowledging the experiential learning as a digital badge

An adult student's readiness, orientation, and motivation to learn may be met by badging when badges require skill and knowledge acquisition. The curriculum of micro-credentials is at a more detailed level than a typical 3-credit hour college course. This sharper focus allows educators to better keep up with the pace of change in the knowledge marketplace. The subject-matter can involve a micro-credential that learners need in a timely fashion to increase job prospects, address a workplace problem, or accomplish a job task. For example, learning the fundamentals of project management and the micro-credential may help a potential candidate compete better for employment or could help a current employee better plan a newly assigned work project. The timing and applicability of the badge content serve as powerful motivators for students. Likewise, other external reasons to pursue a badge such as to leverage it for a promotion at work or to find a different job which may lead to a better quality of life (a robust internal motivator). Understanding their clients' wish for an improved quality of life and the potential of micro-credentials to realize that wish, led to a combined effort between DAIS and UWEX.

UWEX, DAIS Partnership

The ULS was launched in March of 2016 by the UWEX's Continuing Education Outreach & E-learning division in partnership with Georgia Institute of Technology, University of California-Davis Extension, University of California Irvine-Extension, University of California Los Angeles Extension, and The University of Washington Continuum College (retrieved from <http://universitylearningstore.org/about/>). The project aims to provide competency-based curricula centered on workforce skills. It uses authentic assessments, meaning they were deliberately designed to reflect workplace capabilities which were validated by U.S. employers. The assessments are human graded rather than computer graded, usually requiring more sophisticated evaluations than limited choice exams. Successful completion provides access to a printable certificate and digital badge. The store currently offers 36 different competencies (see Appendix A) related to human capital development.

DAIS is the only domestic abuse shelter for all of Dane County, Wisconsin and its 531,273 citizens (DAIS, n.d.; U.S. Census, n.d.). It has provided safety and well-being services for victims of domestic abuse since 1977 (DAIS, n.d.). DAIS' services include community education

and prevention programs, 24-hour telephonic assistance, children programs aimed at those coming from violent homes, legal advocacy, support groups, emergency safety help, and a managing a crisis shelter. Due to a high demand, the crisis shelter expanded from 25 beds to 56 beds in 2014, however, there is a constant waiting list of Dane County victims seeking refuge.

DAIS (n.d.) estimates there are 33 incidents of domestic violence in Dane County daily; 12,000 annually. They report that one-third of all incidents referred to the Dane County District Attorney are domestic violence related. The shelter was at full capacity each day of 2017. As of mid-January 2018, there were 18 women on the DAIS shelter waitlist (M. Minkens, personal communication January 12, 2018). Ninety-three percent of the shelter residents are from below the poverty line. In 2016, seventy-nine percent were black women, and eighty-three percent were women of color (M. Minkens, personal communication January 12, 2018). A DAIS client can remain in the shelter up to 45 days, and it is common for clients to use shelter services more than once. Minkens noted that one client had used the DAIS residence 13 times since 2011. Often shelter residents return to their abuser after leaving the shelter because most lack the financial means to support themselves or their children.

One study found that ninety-four percent of abused women experience some form of economic abuse related to intimate partner abuse and exposure to fiscal maltreatment significantly predicted a decrease in economic self-sufficiency (Postmus, Plummer, McMahon, Murshid, & Kim, 2012). Hahn and Postmus (2014), posit there have been no research studies that have evaluated educational programs specifically for abused women, but the authors argue there have been numerous empirical studies concluding the effectiveness of such programs to move welfare recipients from welfare to the workforce. Hahn and Postmus contend that because many domestic abuse survivors rely on welfare benefits, the findings of educational development for welfare recipients imply an indirect relationship to domestically abused women. Economists Farmer and Tiefenthaler (1997), using game theory and empirical evidence, conclude that as a woman's income level increases the level of domestic violence will decrease. Understanding the relationship between economic self-sufficiency and the abuse cycle, DAIS determined that access to work skills development while in the shelter was needed to help clients increase their ability to find meaningful employment.

Upon learning about the ULS and the possibility of university issued micro-credentials, DAIS contacted the UWEX in the summer of 2017 to be exploring a collaboration. Examining the curriculum catalog, DAIS identified 18 competencies as being of value for abuse survivors seeking work skill development (shown with asterisks in appendix A). Training by ULS staff with DAIS members took place in November of 2017.

As of January 2018, DAIS was seeking grant funding to help cover the cost of training and assessment for their clients (usually \$25 for each ULS assessed badge). DAIS is exploring different options on how to offer the ULS program to their clients beyond survivors completing learning modules independently. One such thought was to invite career specialists to conduct in-person classroom training with the DAIS residents using the ULS content for course material.

Challenges and Recommendations

There are several challenges for the micro-credential development in higher education. Likewise, the ULS is still in its infancy, also has difficulties and it too can be improved to serve its clients better. As a relatively new educational paradigm, the micro-credential market is a promising area for academic research. First, however, there must be agreed upon standards and measures that help define what a micro-credential is and its worth to those pursuing it.

Currently, organizations issue micro-credentials such as badges and non-academic certificates for a wide range of activities that are unregulated. One might earn a badge for being a manager in a job, having completed university-designed coursework and associated assessments, or just by paying an online firm to issue a badge. The lack of oversight raises questions about quality, rigor, and effectiveness of programs issuing micro-credentials. It is impossible for hiring companies to distinguish credentials purchased versus those earned given the loosely controlled environment. Likewise, the issuers of micro-credentials also involve a range of entities, from academic institutions to small businesses, which further confound the worth of the credential.

It is time for credentialing standards and universal measures to be established, audited, and enforced by accrediting agencies to help potential customers and employers assign the value of a micro-credential. In the U.S., the Department of Education and its regional and national accrediting agencies recognized by the Secretary of Education as reliable authorities concerning the quality of education or training is the most likely place to begin regulating the micro-credential market. Presently, students who pursue micro-credentials are not eligible for Federal financial aid in the U.S. to cover the cost of micro-credentials. This lack to funding is another challenge for the range of adult learners, including those in marginalized populations, to acquire the necessary knowledge and skills to keep pace with the rapid rate of change across industries to compete for good paying jobs. The ULS-DAIS project also revealed some improvements the ULS developers can undertake to serve their customers better.

The ULS was constructed under a business-to-client model. This is the norm for many traditional higher education providers. This model has resulted in limited use of the ULS by clients. The ULS may be better leveraged as a business-to-business model as evident by the DAIS project. Although some individual early adopters may see the usefulness of badges in keeping current with industry changes and filling in gaps on their resumé, marketing to businesses and non-profits provides better access to a considerable number of potential students. Smaller firms that lack in-house training might see value in the ULS badges to develop their workforce without the high-cost of paying for an entire degree program. Non-profits like DAIS may also see value in the focused, low-cost offerings to assist those with limited incomes and unable to access Federal financial aid. Likewise, universities and high school educators may find value in assigning micro-credentials related to applicable coursework to better document student learning and introduce the student to the emerging micro-credential ecosphere. The course content of the ULS could also be improved.

Currently, the learning modules are mainly text-centric requiring a fair amount of reading by students. Andragogical modeling posits adult students want flexibility in how they learn. By

offering more multi-media, including videos that demonstrate skills and audio files that allow adults to listen to course material as they commute or work in their job, provides such flexibility. This agility is necessary to some clients of DAIS who are working multiple low-paying jobs for survival. Furthermore, offering the learning modules in a range of languages makes the ULS even more compelling in the global education marketplace. It is also worth ULS decision makers to consider providing *digital shelf-space* to industry firms competing in the worldwide market.

The ULS could pair with a range of partners from for-profit and non-profit agencies to offer focused programs on skill development in needed areas and emerging technologies. The ULS could play a significant role in granting access to adult learners seeking employment in the areas of healthcare where there are current shortages of workers. For example, working with a hospital, the ULS could support learning modules for Certified Medical Assistants, Home Health Care aids, and Emergency Medical Technicians; positions in need of more credentialed workers. Emerging programs such as Anaplan, data analytics, blockchain, and cryptocurrencies are some areas where the industry is likely to have coursework before academic institutions. Collaborating with industry providers allows faster access for students to develop knowledge and skills associated with these promising areas of business.

Given the newness of micro-credentials and the looseness of the market, there are many areas for scholars to examine. What follows is by no means exhaustive but some areas that drew the researcher's attention while working on this project. Perhaps the most needed area for research is scholarly pursuits that attempt to make sense of the micro-credential market by examining who is issuing badges, how firms issue them, their purpose for delivering, the value perception by students, and the level of rigor to earn a badge. Research into online companies selling badges without any requirement for learning, whether didactic or experiential, is another area for examination. Likewise, how organizations are leveraging badges would also be of significance to understand this evolving approach within higher education. Seeing how DAIS plans to use the ULS was something not anticipated by the ULS development team.

As for the ULS-DAIS project, research related to DAIS clients concerning work attainment, skills development, shelter stays data (length of stay, repetitive stays, etc.), economic self-sufficiency, and victim perception of university-issued micro-credential, are just a few areas useful to investigate for better understanding of this new pathway to higher education. Finally, a global perspective on how education providers in other countries are approaching badging, questions of relevancy and rigor, best practices, and lessons learned, would also be useful to this nascent educational approach.

Conclusion

The purpose of this illustrative case study was to convey how a new technologically-based educational methodology, micro-credentialing, is being used to assist vulnerable populations by explaining the collaboration between UWEX's ULS and DAIS to help abused women develop work skills toward reaching economic self-sufficiency and independence from their abusers. As the project centers on adult learners, the case highlights Knowles (1990) andragogical assumptions of this cohort of students. There is much needed to be done to ensure micro-

credentialing is a viable educational methodology this includes better regulation and oversight of those issuing badges. As an advancing educational approach, it provides a fertile domain for scholarly research.

References

- Bower, E.M., and Hollister, W.G. (eds.). (1967). Behavioral Science Frontiers in Education. New York: Wiley.
- Bruner, J. S. (1961). The act of discovery. *Harvard educational review*, 31, 21-32.
- Domestic Abuse Intervention Services. (n.d.). About DAIS. Retrieved from <https://abuseintervention.org/about/contact/#aboutDAIS>
- Domestic Abuse Intervention Services. (2016). Annual Report. Retrieved from https://abuseintervention.org/sandbox77/wp-content/uploads/2012/08/DAIS_2016AnnualReport.pdf
- Farmer, A., & Tiefenthaler, J. (1997). An economic analysis of domestic violence. *Review of Social Economy*, 55(3), 337-358
- Getzels, J.W., and Jackson, P.W. (1962). Creativity and Intelligence, New York: Wiley.
- Hahn, S. A., & Postmus, J. L. (2014). Economic empowerment of impoverished IPV survivors: A review of best practice literature and implications for policy. *Trauma, Violence, & Abuse*, 15(2), 79-93.
- Holmes, G., & Abington-Cooper, M. (2000). Pedagogy vs. andragogy: A false dichotomy?. *The Journal of Technology Studies*, 26(2). Retrieved from <https://scholar.lib.vt.edu/ejournals/JOTS/Summer-Fall-2000/holmes.html>
- Iscove, I., and Stevenson, W.W. (eds.). (1960). Personality Development in Children. Austin, Texas: University of Texas Press.
- Erikson, E. H. (1950). *Childhood and society*. New York: WW Norton & Company.
- Knowles, M. (1973). *The Adult Learner: A Neglected Species*. Houston, TX: Gulf Publishing.
- Knowles, M. (1990). *The Adult Learner: A Neglected Species* (4th Ed.). Houston, TX: Gulf Publishing.
- Knowles, M. (1984). *Andragogy in Action*. San Francisco: Jossey-Bass.
- Kearsley, G. (2010). Andragogy (M.Knowles). The theory Into practice database. Retrieved from <http://tip.psychology.org>
- Postmus, J. L., Plummer, S. B., McMahon, S., Murshid, N. S., & Kim, M. S. (2012). Understanding economic abuse in the lives of survivors. *Journal of Interpersonal Violence*, 27(3), 411-430.
- U.S. Census Bureau. (n.d.). Quick facts Dane County, Wisconsin. Retrieved from <https://www.census.gov/quickfacts/fact/table/danecountywisconsin/DIS010216>
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological review*, 66(5), 297.

Appendix A: ULS Competencies

1. Succeeding in the Job Interview Through Active Listening Skills*
2. Emails That Work: Writing for the Digital Age*
3. Communicating Professionally via Phone*
4. Winning with Words: Refine Your Business Writing Skills*
5. Writing For Results with Proper Style and Grammar*
6. Developing a Project Charter
7. Defining Project Requirements and Scope
8. Mapping the Business Supply Chain
9. Using Supply Chain Tools for Maximum Impact
10. Managing Supply Chain Risk
11. Getting a Job at a Startup or Small Business*
12. Understanding the World of Startups
13. Thinking Like an Entrepreneur
14. Business Presentations: The Persuasive Speaker*
15. Business Meeting Etiquette*
16. Writing Meeting Minutes and Follow-Up Emails*
17. Creating Meeting Agendas & Announcements*
18. Designing Effective Workplace Charts and Graphs
19. Requirements Elicitation
20. HIPAA Orientation for Physician Practices & Clinics
21. Creating a Work Breakdown Structure (WBS) in a Project
22. Decision Making in Teams*
23. Communicating & Deliberating in Work Teams*
24. Establishing and Maintaining a Positive Work Environment*
25. Forming Strong Work Teams*
26. Managing Team Conflict*
27. Performing a Cost-Benefit Analysis in Project Management
28. Creating a Stakeholder Management Plan for Projects
29. Speaking Effectively in the Global Workplace*
30. Applying Best Practices for Email Communication in the Global Workplace*
31. Presenting Effectively to Global Audiences*
32. Composing Clear And Concise Workplace Reports
33. Team Leadership
34. Public Speaking: Framing and Organizing Presentations
35. Public Speaking: Audience Analysis
36. Public Speaking: Research Strategies for Public Presentations

* Denotes DAIS requested modules for their clients