



Engaging the Overextended: Designing Higher Education for Women Balancing Care, Work, and Learning

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Abstract

A central challenge facing higher education is the persistent disconnect between access-expanding initiatives and the lived realities of women navigating caregiving, employment, and academic aspirations. This white paper explores how life-aligned design principles, emphasizing flexibility, belonging, and recognition of lived expertise, can strengthen engagement. Drawing on findings from the 2025 University of Phoenix Career Optimism Special Report™ Series: Moms in the Sandwich Generation report and related scholarship, it examines how institutional models must evolve to reflect modern learners' conditions. Despite growing recognition of adult and non-traditional learners, many institutions remain structured around assumptions of uninterrupted time, linear progression, and predictable availability. These legacy models undermine engagement for "sandwich moms," whose participation is shaped by fragmented time, financial strain, and overlapping responsibilities. The analysis also explores the role of AI-enabled supports, stackable learning pathways, and equitable credit for prior learning in reducing cognitive load and expanding opportunity.

Key recommendations call on higher education leaders and policymakers to redesign engagement models, embrace modular and flexible structures, validate experiential knowledge, and adopt technology widening access without reinforcing inequity. The future of equitable higher education will be shaped not only by innovative tools and pathways, but by institutions committed to designing systems honoring the full complexity of learners balancing family and future.

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Introduction

The 2025 University of Phoenix Career Optimism Special Report™ Series: Moms in the Sandwich Generation (MSG) offers a vivid window into how women balancing caregiving, work, and education navigate daily routines marked by limited time, emotional overload, and minimal systemic support. Findings emphasize the pressures shaping educational decisions for these “sandwich moms:” 59% reported their combined roles have restricted professional growth, and 51% have left a job due to caregiving conflicts (University of Phoenix, 2025). These workplace constraints directly influence whether women can begin, persist in, or return to higher education. For these learners, responsibilities do not pause for class. As the 2025 MSG indicates, 62% of sandwich moms feel maintaining a career is a luxury, illustrating how caregiving and employment absorb the time and energy traditionally needed for academic progress.

Higher education largely relies on models designed for students with steady availability and continuous focus (El Galad et al., 2024). This imagined stability rarely exists for sandwich moms, who describe learning in irregular windows, stop-and-start rhythms, and emotionally taxing transitions between caregiving, work, and coursework (Blake et al., 2023). Recent narrative inquiries echo this: learners recounted studying in cars between pickups, working late at night, and completing assignments in scattered bursts (Sylvester, 2025).

The emotional toll is equally significant. Women describe the guilt of turning down their children to meet deadlines and the fatigue of constantly shifting between roles (Sylvester, 2025). The 2025 MSG findings reinforce this strain: 42% of mothers fear disclosing caregiving responsibilities at work could lead to negative consequences. These are not personal shortcomings but reflect structural barriers shaping whether and how women can participate in higher education.

This white paper argues engagement is a design problem, not a motivational one. When educational systems reflect learners’ lived conditions such as irregular time, limited cognitive bandwidth, and blended responsibilities, engagement becomes not only possible, but sustainable. By shifting from expecting endurance to designing for humanity, higher education can build environments where learning coexists with the unpredictable, demanding rhythms of real life.

Understanding the Overextended Learner

“Sandwich moms,” women simultaneously caring for children and aging relatives while working, live within daily conditions compressing time, energy, and attention. Their learning environments are not defined by a lack of motivation, but by persistent systemic constraints. In higher education, these women are often classified as non-traditional students—adults pursuing education while managing significant commitments such as employment and caregiving (National Center for Education Statistics, 2024). Sandwich moms often meet multiple non-traditional student criteria, compounding the logistical complexity and cognitive juggling required for academic participation (Hahn, 2020; Lin, 2016; Sylvester, 2025).

Emotional and logistical pressures elevate attrition risk. Non-traditional women learners report limited support networks and reduced self confidence, factors strongly linked to attrition risk (Kumari

et al., 2024). The 2025 MSG findings reflect this vulnerability: 64% of sandwich moms use most of their paid leave for caregiving rather than for rest, health, or professional development (University of Phoenix, 2025). Time is not the only depleted resource—emotional bandwidth is often exhausted, a dynamic well-documented among non-traditional women students (Armstrong-Carter et al., 2022; Yucel & Latshaw, 2025).

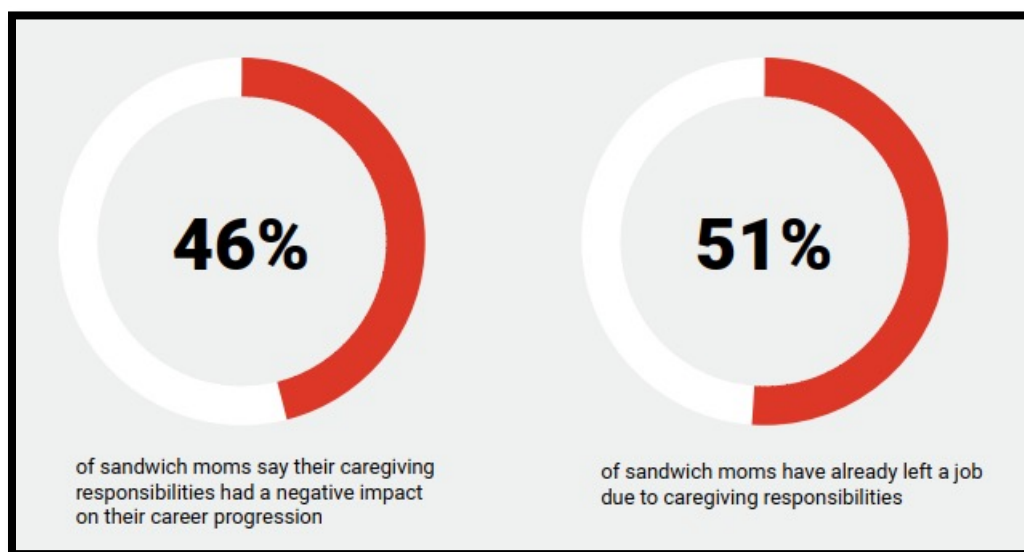
Qualitative narratives bring these pressures to life. Women described attempting to meet academic expectations amid persistent guilt, elevated stress, and limited privacy (Sylvester, 2025). Similarly, 35% of sandwich moms identify lack of time as the primary barrier to educational or professional growth (University of Phoenix, 2025). These accumulated demands narrow the cognitive space necessary for reflection, learning integration, and sustained persistence.

Academic continuity is further disrupted by unpredictable caregiving needs, job demands, and life emergencies. These interruptions do not indicate disengagement but rather reveal institutional models still assume uninterrupted focus and consistent availability (Lee, 2025; Sylvester, 2025). According to 2025 MSG data, 27% of mothers decline educational opportunities due to caregiving responsibilities, and 46% report caregiving negatively affects their career progression (University of Phoenix, 2025). Figure 1 illustrates how caregiving responsibilities directly impact professional mobility, shaping the broader context in which educational decisions are made.

These realities expose a learning landscape shaped more by institutional inflexibility than individual deficits. Non-traditional women students are not lacking in drive; they are navigating complex, volatile conditions higher education systems often fail to acknowledge. To support them effectively, institutions must design engagement strategies reflecting their lived rhythms, constraints, and strengths.

Figure 1

Impact of Caregiving Responsibilities on Career



(University of Phoenix, 2025)

Translating Workforce Data into Higher Education Reality

For sandwich moms, work, family, and education do not occur in separate lanes—they collide, overlap, and shift constantly. The 2025 MSG report highlights how organizational systems, including higher education, are misaligned with the lived experiences of caregiving women. Notably, 71% of mothers are actively seeking new employment, largely in pursuit of greater stability, flexibility, or advancement (University of Phoenix, 2025). This is not a sign of disengagement, but an effort to reconcile professional aspirations with inconsistent time and competing demands.

Higher education frequently replicates the same design-level frictions found in the workforce. Fixed schedules, synchronous course expectations, and curricula designed around continuous availability often exclude learners who study in fragmented intervals between caregiving and job duties. Studies confirm this reality: learners frequently reported studying after children are asleep, during commutes, or in short bursts throughout chaotic days (El Galad et al., 2024; Sylvester, 2025). The issue is not lack of commitment but a structural misalignment between educational design and real life.

Rigid systems amplify this misalignment, as 35% percent of sandwich moms had flexible work requests denied, and 45% felt uncomfortable even asking for adjustments (University of Phoenix, 2025). When flexibility is denied at work, it becomes even more essential in education, yet higher education often mirrors this inflexibility, with faculty assuming steady participation, traditional assignment timelines, and linear pacing (Arifah et al., 2025). When family crises or caregiving demands arise, many students are forced to choose between academic progress and fulfilling essential family responsibilities—choices traditional course designs fail to accommodate (Armstrong-Carter et al., 2022; Sylvester, 2025).

Higher education is at an inflection point. Continuing to rely on traditional models reproduces the same inequities women face in the workforce: rigid expectations, unstable advancement pathways, and exclusion through design. Institutions adopting life-responsive structures, supporting stop-and-start learning, reducing cognitive load, and anticipating disruptions create inclusive on-ramps to learning and advancement.

Recognizing how workforce conditions shape educational access reveals a key truth: engagement must be enabled by structures in alignment with the realities of overextended learners. Only by rethinking time expectations, instructional design, and institutional policies can higher education evolve from a competing demand into a stabilizing force in learners' lives.

Engagement Through Accessibility

Learning is not shaped solely by motivation or ability, but by whether learners can realistically access academic work within the fragmented rhythms of their lives. For overextended women, time is often the most limited resource. With many mothers explaining caregiving responsibilities directly prevent them from engaging in further education or professional development, this pressure shapes engagement long before academic tasks begin (University of Phoenix, 2025). Traditional course structures often assume uninterrupted time, yet many adult women engage in coursework only during

irregular windows shaped by caregiving and work demands (Blake et al., 2023; Sylvester, 2025). When institutions design around time abundance, learners encounter a double bind: inflexible work schedules restrict availability, and academic systems frequently replicate those constraints.

Engagement metrics built around frequent postings or rigid pacing also fail to reflect these realities, as learners may be deeply engaged but out of sync with standard timelines because their study time occurs at non-traditional hours or during short gaps in their day (Liu et al., 2024; Sylvester, 2025). A working adult who contributes at midnight demonstrates the same level of commitment as one who posts at noon; they are simply engaging on a different timeline. Shifting emphasis from timing to the quality of participation creates a more accurate and equitable picture of student engagement.

Accessibility improves when institutions adopt structures matching this reality. Modular courses, microlearning opportunities, and asynchronous participation reduce the cognitive load required to re-enter coursework after interruptions (Alba, 2025; Rose et al., 2023). These design choices not only accommodate unpredictability but also affirm fragmented study as legitimate study, a dynamic proven to improve persistence for non-traditional women learners when flexibility is available (Sylvester, 2025).

Accessibility also extends beyond coursework. Enrollment processes limited to narrow operating hours, advising tied to real-time meetings, and support services confined to standard workdays create barriers disproportionately affecting overextended women (Blake et al., 2023; Stamou et al., 2024).

Designing for accessibility is fundamentally a matter of equity. When institutions assume time abundance, they privilege learners with fewer external demands. Designing around time scarcity instead provides overextended women viable pathways to succeed, making engagement possible not through intensified effort but through systems creating space for learning in the margins of full, complex lives.

Framework for Reimagining Engagement

Redesigning engagement for overextended women learners requires a shift in how institutions conceptualize the relationship between life context and academic behavior. Engagement is often framed as a matter of individual motivation or effort, yet adult learners operate within environments shaped by overlapping responsibilities and fluctuating emotional and cognitive demands. A more equitable model recognizes engagement not as an internal trait, but as an outcome of intentional structural design. Three foundational theories in adult learning offer a lens through which to reframe engagement as a function of system alignment: Andragogy, Transformative Learning, and Non-Traditional Student Attrition.

Andragogy: Relevance and Autonomy

Knowles' andragogy emphasizes adult learners thrive when learning is relevant, self-directed, and experience-driven. His six assumptions—self-concept, experiential learning, readiness to learn, immediate applicability, internal motivation, and a need to know—highlight the importance

of autonomy and real-world relevance (Clair, 2024; Tiedeman & Knowles, 1979). For overextended women, instructional approaches drawing from lived experience, support flexible pacing, and connect academic tasks to personal or professional goals foster deeper engagement, even when time and energy are limited. When autonomy and relevance are aligned, persistence strengthens.

Transformative Learning: Experience as a Source of Insight

The Transformative Learning Theory, developed by Mezirow (1991), positions reflection on lived experience as a catalyst for personal and intellectual growth. Many caregiving learners are already engaged in ongoing identity shifts and critical reflection as they navigate complex personal, professional, and academic roles (Murphy, 2021). Learning environments validating personal experience, encourage perspective transformation, and support reflection allow students to integrate academic learning with personal development.

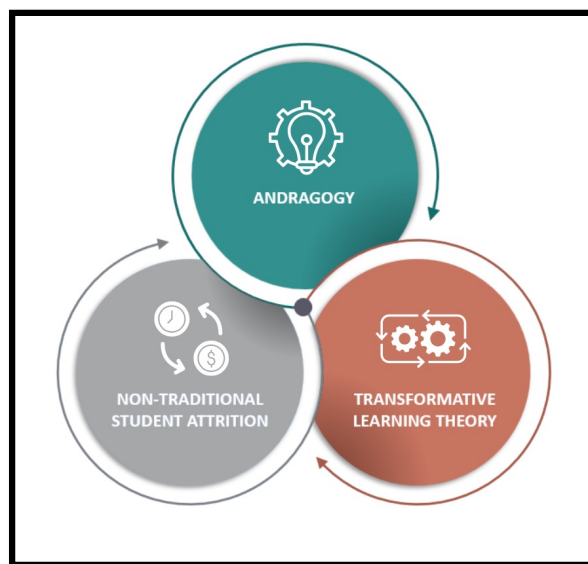
Attrition Theory: Reducing External Pressures

Theory of Non-Traditional Student Attrition emphasizes how persistence among adult learners is shaped more by external pressures than academic ability (Bean & Metzner, 1985). For many overextended women learners, patterns of academic discontinuity stem from environmental constraints rather than disengagement or lack of capacity (Howard et al., 2025; Wube et al., 2024). Institutions anticipating disruption and providing proactive supports can meaningfully reduce withdrawal risk and bolster persistence.

Figure 2 depicts how relevance, autonomy, reflection, and environmental support collectively shape engagement. This integrated framework demonstrates a core truth: engagement emerges from design choices reflecting the lived conditions of learners, not from expectations of individual endurance. When systems align with reality, learners gain momentum, and momentum sustains progress.

Figure 1

Integrated Conceptual Framework



Recognizing Experience: Caregiving and Lifelong Learning

Overextended women bring a wealth of knowledge and experience to higher education, forged through caregiving, work, and community leadership. However, these competencies are rarely recognized through formal credit, creating a recognition gap that slows degree completion, increases financial burden, and reinforces a feeling of “starting from behind” (Charkova & Somova, 2023; Flaherty, 2024).

Evidence shows caregiving involves college-level cognitive, organizational, and leadership skills. Women often navigate complex medical appointments, coordinate multi-generational households, manage budgets, and make high-stakes decisions—all under time pressure (Armstrong-Carter et al., 2022; Flaherty, 2024; Sylvester, 2025). These are not peripheral life experiences but reflect applied, critical, and integrative learning valued by higher education institutions.

Despite their demonstrated competence, many women are excluded from accelerated pathways or undervalued in academic spaces because this knowledge remains informal and undocumented. The 2025 MSG data reflects this impact as many sandwich moms reported feeling professionally stalled without formal credentials, confirming caregiving responsibilities consume the time and resources needed to pursue those credentials (University of Phoenix, 2025).

Credit for Prior Learning (CPL) as an Equity Tool

Credit for Prior Learning (CPL) provides a formal mechanism to recognize experiential knowledge gained outside the classroom, including caregiving, employment, military service, and community involvement (Flaherty, 2024). CPL not only accelerates degree completion and reduces cost, but affirms learners’ identities as competent, capable adults. This is especially critical for overextended women, whose time is limited and whose engagement depends on feeling seen and valued from the start.

Despite its clear advantages, CPL remains significantly underutilized. Barriers include limited awareness, insufficient guidance, and opaque assessment processes, especially when students seek recognition for expertise developed through caregiving. Many learners are unsure how to articulate caregiving as credit-bearing knowledge or even realize such credit is possible (Kilgore, 2024; Leibrandt, 2020). Strengthening CPL pathways, incorporating caregiving within eligibility criteria, and providing dedicated advising are essential steps forward. Recognizing caregiving as legitimate learning is not merely symbolic; it reflects an accurate understanding of the leadership, resilience, and problem-solving it cultivates. When institutions acknowledge this reality, they expand access and communicate a powerful message: students are not beginning from scratch, but advancing from a substantial foundation already built.

Building Belonging: Community as Engagement Infrastructure

Belonging is not a luxury for overextended learners; it serves as the emotional infrastructure sustaining persistence. When students see their realities reflected in others’ experiences, connection replaces isolation, and engagement becomes sustainable. Yet for many caregiving women, belonging is elusive, reporting exclusion in professional settings and hesitate to disclose caregiving

responsibilities out of fear of judgment or reprisal (University of Phoenix, 2025).

This invisibility often extends into academic environments, where caregiving is minimized or misunderstood. Research consistently confirmed non-traditional women learners have limited opportunities for authentic connection, further intensifying feelings of disconnection (Beckwith, 2023; Hahn, 2020). Without intentional structures acknowledging and normalizing their experiences, these students are left to navigate academic challenges in solitude.

To counteract this, community must be designed, not left to chance. Peer cohorts, structured discussion spaces, and mentoring networks offer meaningful avenues for connection. Learners repeatedly report generic discussion boards or loosely organized group activities fail to foster genuine belonging (Beckwith, 2023; Sylvester, 2025). Instead, affinity groups, cohort-based models, and shared-interest communities, particularly those centered on caregiving or work roles, normalize struggle, reduce stigma, and transform private exhaustion into collective understanding.

Faculty also play a significant role in shaping belonging. Relational teaching practices, such as personalized feedback, empathetic communication, and flexibility rooted in trust, signal to students they are seen and not scrutinized. These practices create emotional scaffolding making rigor reachable during moments of stress (McNeill & Bushaala, 2023; Raboca & Carunarean, 2024).

Institutions investing in proactive advising, sustained mentoring across multiple courses, and clearly defined support pathways strengthen the social architecture of learning (Cadete & Ruggunan, 2024). When connection is built into the structure of academic programs rather than treated as an add-on, students experience a system intentionally designed to support their success.

Belonging reduces attrition by distributing the emotional demands of learning across a supportive network. For many overextended women, education often unfolds in isolation, late at night, between caregiving responsibilities, or in moments shadowed by doubt. Strong relational supports shift those moments away from solitary endurance and toward a sense of collective progress. Belonging is not an optional enhancement; it is a central equity strategy transforming engagement from an individual struggle into a shared experience.

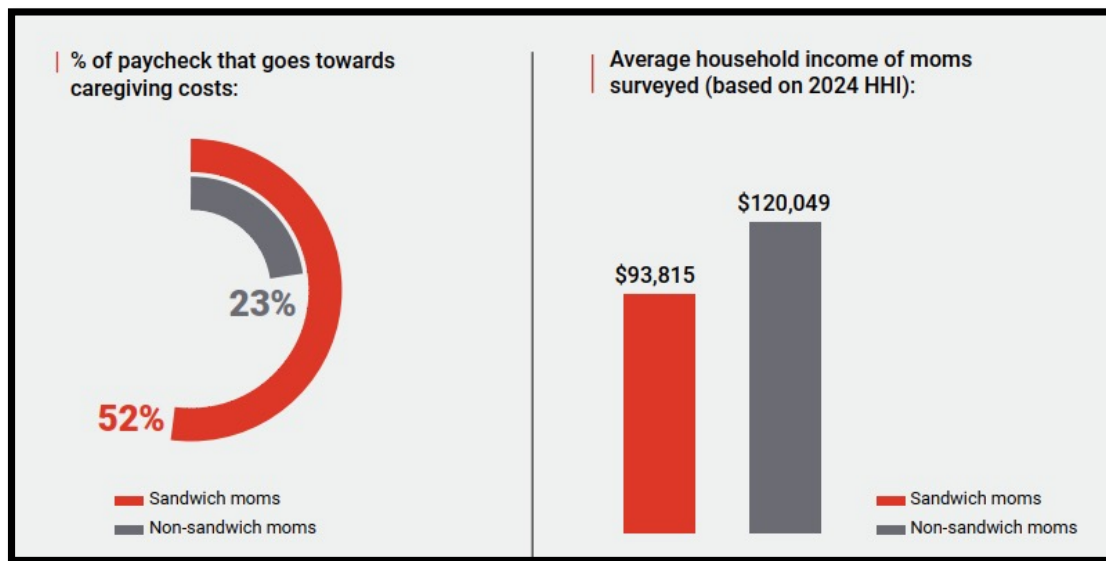
Financial Realities Shaping Educational Choice

Financial instability is one of the most defining forces shaping whether overextended women can access, persist in, or complete higher education. The 2025 MSG report paints a stark picture: over one-third of sandwich moms reported their income does not cover essential needs, and these gaps coexist with significant caregiving-related costs—including out-of-pocket childcare, eldercare, and lost wages (University of Phoenix, 2025).

This financial strain has cascading effects. As shown in Figure 3, sandwich-generation mothers spend more than twice the proportion of their income on caregiving compared to non-sandwich mothers—while earning lower average household incomes. The result is a structural squeeze: heightened expenses, diminished earnings, and little room to invest in education.

Figure 3

Caregiving Burden and Income Disparities Among Sandwich Moms



(University of Phoenix, 2025)

For many learners, tuition is not simply a price tag; it represents a significant financial risk. Enrollment decisions are measured against childcare expenses, healthcare costs, and household budgets that can shift from month to month (Hanson, 2025). Even highly motivated students may postpone enrollment, reduce their course load, or withdraw altogether, not due to academic challenges but because pressing family needs take precedence.

Financial precarity deepens when paired with debt anxiety. Women hold a disproportionate share of student loan debt nationally, and the burden is especially pronounced for mothers (National Center for Education Statistics, 2024). Many report taking on loans they had hoped to avoid, or opting out of education entirely, because repayment feels untenable during caregiving-intensive periods (Sylvester, 2025).

These immediate financial pressures often obscure long-term gains. The 2025 MSG data indicates sandwich moms feel professionally stalled without additional credentials, yet when education must compete with meeting basic needs, it shifts from an attainable pathway to a distant aspiration (University of Phoenix, 2025).

Designing Responsive Financial Supports

If institutions aim to advance equity, financial supports must account for the volatility shaping many learners' lives. This requires extending beyond traditional aid models to include last-dollar scholarships closing lingering affordability gaps, emergency microgrants for unexpected caregiving expenses, childcare stipends for student-parents, subscription-based tuition structures aligned with fluctuating income, and employer co-sponsorships reducing both up-front costs and time pressures.

Aid systems also need redesign for genuine accessibility. Processes limited to narrow office

hours or dependent on complex paperwork exclude learners who lack discretionary time or consistent support. Financial design should presume irregular income, caregiving disruptions, and the necessity of flexible payment options.

When institutions treat financial strain as a structural condition rather than an individual budgeting challenge, education becomes a stabilizing force instead of an added stressor. For overextended women, access depends not only on affordability but on predictability, responsiveness, and confidence the institution is structured to meet the realities of their lives.

Bridging Learning Pathways and Career Mobility

For overextended women, education is a practical strategy for gaining stability, advancement, and flexibility, yet traditional degree pathways often fail to align with the constraints and aspirations of these learners. Lengthy, rigid programs requiring continuous enrollment and delayed payoff are incompatible with caregiving lives shaped by fragmentation and unpredictability.

Stackable and modular learning pathways offer a more viable alternative. Microcredentials, certificate-to-degree models, and competency-based structures allow learners to accumulate progress in manageable increments. These formats accommodate varying schedules and offer tangible, workplace-relevant credentials applied immediately, not only after graduation. Research shows when learners see a direct connection between academic work and professional growth, they experience stronger momentum, deeper confidence, and clearer relevance (Klein-Collins et al., 2021; Sylvester, 2025).

Work-integrated learning further bridges the gap between lived experience and formal education. Job-embedded assignments, applied projects, and workplace-based assessments validate the skills students already use daily—from decision-making under pressure to caregiving-informed leadership (Ferns et al., 2024). These structures allow students to demonstrate competence before completing full degrees, creating value for both learners and employers.

Employer partnerships are essential to the success of these models. Tuition support, paid learning time, mentorship programs, and co-designed curricula reduce the time-resource conflict disrupting continuity for non-traditional women learners. According to MSG findings, 70% of sandwich moms were considering job changes in pursuit of flexibility or career growth (University of Phoenix, 2025). When employers invest in educational access, they do not just support learners, they build a more resilient and skilled workforce.

Many overextended women describe feeling guilty for dedicating time to education, especially when it pulls attention away from family, but when learning is visibly linked to career advancement, and endorsed by employers, this tension eases (Sylvester, 2025). Education becomes a shared investment rather than a solitary burden.

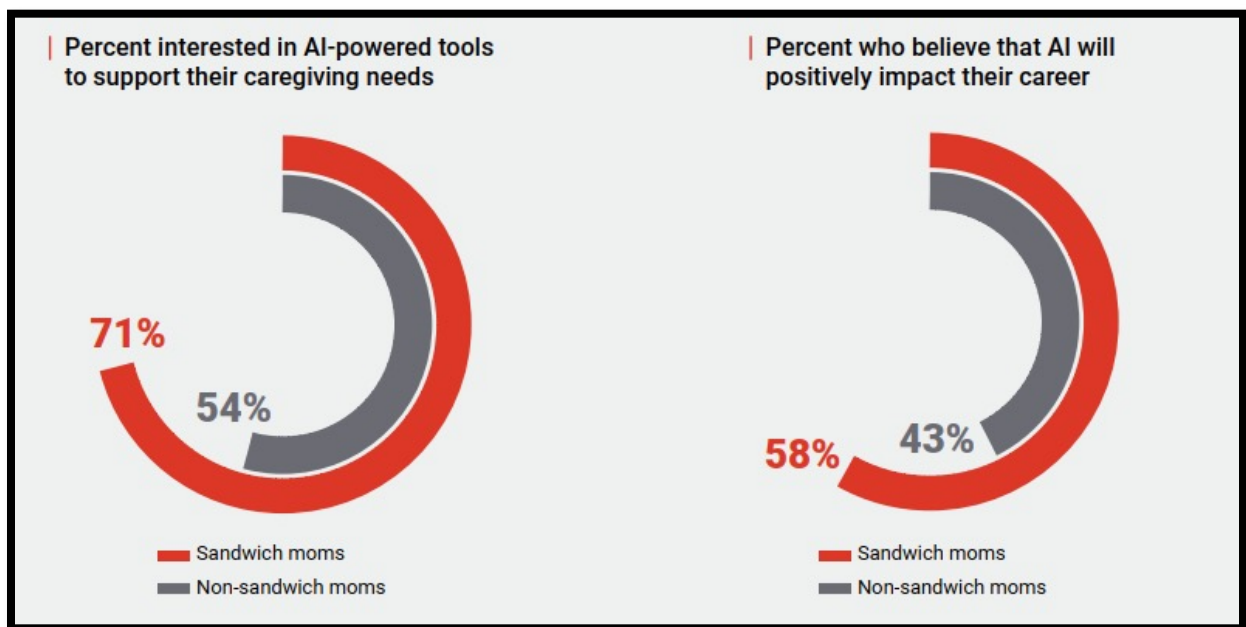
Reimagining pathways around flexibility, relevance, and integration allows education to support economic mobility without demanding ideal circumstances. These designs make academic progress possible in real time and position higher education as a means of transformation rather than exclusion.

AI as an Equity Engine for Overextended Learners

Generative artificial intelligence (AI) offers a promising pathway for reducing the cognitive load carried by overextended learners. For these learners, daily life often involves rapid task-switching, emotional exhaustion, and limited uninterrupted time—conditions known to disrupt academic continuity and make re-entry into coursework challenging (Chu et al., 2022; Deloitte, 2022). As shown in Figure 4, many learners are open to AI-enabled technology supporting caregiving and academic success. MSG findings reveal 71% of sandwich moms express interest in AI resources to assist with caregiving, and 58% believe AI could positively impact their career trajectory (University of Phoenix, 2025).

Figure 4

Interest in AI-Enabled Support Among Sandwich Moms



(University of Phoenix, 2025)

AI's most significant contribution lies in supporting learning re-entry. When learners return to coursework after a caregiving interruption, they often face a steep mental cost to regain context. AI systems bookmarking progress, summarizing recent activity, and prioritizing next steps help learners re-engage without extensive review, lightening the cognitive burden and preserving momentum (World Economic Forum, 2025).

Personalized, adaptive learning environments also enhance accessibility. AI can adjust pacing, content sequencing, and instructional style to accommodate irregular study rhythms and shifting availability (Aarathy, 2025; Soulami et al., 2024). When a learner is pulled away mid-module due to caregiving, AI can gently guide them back, respecting discontinuity as part of the learning journey rather than treating it as disengagement. AI also enables just-in-time academic support. Technologies offer instant feedback, auto-generated summaries, and micro-explanations empower students to

make progress during late-night or early-morning study sessions, when human help is typically unavailable (Ma et al., 2025). For learners studying in fragmented windows, this kind of real-time scaffolding makes continued engagement far more feasible.

For faculty, AI reduces administrative burden and creates space for more relational, student-centered teaching. By offloading routine tasks such as grading, content suggestions, or draft triage, AI allows instructors to focus on what matters most: personalized feedback, empathetic communication, and flexibility (Crompton & Burke, 2023). These are the supports non-traditional women learners consistently identify as essential to their success.

Finally, AI fluency is increasingly becoming a required workforce competency. Exposure to AI technology within learning environments builds confidence and skills directly transferable into the workplace. This is particularly meaningful for caregiving women seeking to upskill, pivot careers, or gain recognition in fast-evolving industries (World Economic Forum, 2025). When education helps build both academic and workforce readiness, its value multiplies.

However, AI must be implemented with care, reflecting human-centered design, prioritizing transparency, and protecting learner privacy. Most importantly, AI must respect the irregular and deeply human rhythms defining the lives of overextended students. When done right, AI does not replace empathy but compliments it.

Implications for Higher Education Leaders

Higher education leaders are operating in a learning landscape where long-standing assumptions about time, availability, and engagement no longer reflect the reality of a growing share of their students. Overextended learners are not short on motivation or commitment; they are navigating intersecting structural constraints such as caregiving, employment, financial strain, and institutional models never designed with their circumstances in mind.

Engagement must be understood as an institutional outcome rather than an individual responsibility. Students succeed when engagement structures account for fragmented schedules, cognitive load, and the emotional complexities of modern life. This shift requires leaders to move beyond one-size-fits-all approaches and toward systems-level design aligned with how students actually live and learn.

1. Reimagine Time and Engagement Structures

Replace compliance-based expectations—like frequency of log-ins or discussion posts—with systems emphasizing depth, progress, and meaningful participation. Build structures accommodating irregular availability and reduce penalties for nonlinear progress. Flexible pacing, asynchronous options, and supportive re-entry windows are not concessions; they are essential components of equitable design.

2. Treat Belonging as Academic Infrastructure

Belonging is foundational to persistence. Leaders should invest in faculty development centered on relational pedagogy, empathy, and inclusive practice. Strengthen pathways connecting

students to communities through mentoring, cohort models, affinity groups, and proactive advising. These relational networks transform isolation into sustained engagement.

3. Prioritize Flexible, Stackable Learning Pathways

Modular, competency-based, and stackable credentials help students maintain momentum without delaying achievement. Such pathways support academic progress and align with workforce advancement. When learning is immediately applicable and professionally valued, students are more likely to persist, and employers are more inclined to invest in their success.

4. Recognize and Credential Lived Expertise Through CPL

Acknowledge caregiving, workplace leadership, and community contributions as valid sources of academic knowledge. Expand CPL opportunities, streamline assessment processes, and explicitly identify caregiving as eligible expertise. This approach is not only efficient—it is a necessary act of equity and recognition.

5. Use AI Thoughtfully to Expand Capacity

Integrate AI tools reducing administrative burden, facilitate re-engagement, and provide timely academic support. Prioritize human-centered design and guard against replicating inequities. Employ AI to strengthen empathy-driven practices rather than replace them. The aim is not automation alone but systems responsive to the nonlinear realities of contemporary learning.

Equity in higher education cannot be realized by expecting students to simply exert more effort. It depends on creating systems designed to function more effectively. Leaders who ground their decisions in learners' actual circumstances, rather than in idealized assumptions, will be better positioned to reduce attrition, strengthen engagement, and foster meaningful, long-term outcomes.

Recommendations Matrix

Redesigning engagement for overextended women learners requires more than isolated interventions, it demands a comprehensive shift in institutional priorities. The matrix below outlines five strategic pillars, each rooted in the key themes of this white paper: flexibility, belonging, recognition of expertise, and technology as a tool for equity.

Table 1*Support Recommendations Matrix*

Strategic Pillar	Purpose	Supporting Tactics
1. Redesign Engagement Around Real-Life Conditions	Position engagement as an institutional responsibility aligned with fragmented schedules and nonlinear progress.	<ul style="list-style-type: none"> • Prioritize depth and progress over frequency requirements • Offer multiple participation modes and flexible pacing • Provide re-entry supports for students returning after interruptions
2. Build Community and Belonging as Academic Infrastructure	Embed relational connection as a core component of persistence and engagement.	<ul style="list-style-type: none"> • Create peer cohorts, affinity groups, and mentoring networks • Train faculty in relational and inclusive teaching practices • Ensure advising and support services are visible, proactive, and easy to access
3. Expand Flexible and Stackable Learning Pathways	Enable momentum through modular, immediately applicable learning options.	<ul style="list-style-type: none"> • Scale stackable credentials and microcredential pathways • Integrate competency-based and applied learning • Allow real-time demonstration and credentialing of skills
4. Recognize and Leverage Lived Expertise Through CPL	Advance equity by validating experiential learning from caregiving, work, and community leadership.	<ul style="list-style-type: none"> • Expand CPL options across programs • Simplify documentation and assessment processes • Name caregiving explicitly as eligible expertise
5. Use AI Thoughtfully to Expand Human Capacity	Increase responsiveness and reduce cognitive load through human-centered AI tools.	<ul style="list-style-type: none"> • Use AI for re-entry summaries and next-step guidance • Provide automated scaffolding during non-traditional study hours • Offload routine administrative tasks to free faculty for deeper engagement

Conclusion

Overextended women learners navigate education within the margins of full lives, shaped by caregiving, employment, and economic uncertainty. Their ability to persist is not primarily a matter of motivation, but a reflection of how well educational systems align with real-world constraints.

Institutions built on assumptions of uninterrupted time, predictable schedules, and singular focus unintentionally create barriers which exclude rather than support. Rigid models place the responsibility for adaptation on learners, reinforcing inequities and obscuring the strengths they bring to their education.

A more equitable path is fully within reach. When learning environments prioritize flexibility, cultivate belonging, and recognize lived expertise, engagement becomes both attainable and sustainable. Technology used to reduce cognitive and emotional strain can widen opportunity by meeting learners where they are rather than deepening existing gaps.

Advancing equity does not require lowering expectations; it requires redesigning structures. Shifting from endurance-based models to systems aligned with the realities of modern life enables institutions to respond to the diversity and complexity of today's learners. Caregiving, employment, and education will continue to intersect for millions. Institutions best prepared for the future are those who acknowledge this reality and design accordingly. Building for real life is not a concession—it is the future of higher education for women who have always learned under pressure.

Author Biography

Jessica Sylvester is a higher education leader with over 18 years of experience advancing institutional excellence and student success. She currently serves as Senior Manager of College Operations, leveraging data-driven insights to foster collaboration and drive strategic initiatives. In addition to her leadership role, Sylvester is an Associate Faculty member with the College of Social and Behavioral Sciences, Education, and IT, and was recognized with the Phoenix 500 award in both 2022 and 2023.

A passionate advocate for innovation in higher education, Sylvester's research interests include the impact of artificial intelligence on skill demands, institutional practices, and student learning experiences. She is also dedicated to advancing inclusive, student-centered learning environments and promoting educational equity for non-traditional learners.

Sylvester holds a Doctor of Education with a specialization in Higher Education, a Master of Business Administration, and a Master of Arts in Education/Adult Education and Training from the University of Phoenix. She holds a Bachelor of Social Work from Arizona State University. Originally from Canada, she now resides in Arizona with her husband, children, and dogs.

References

- Aarathy, T. S. (2025). Impact of Artificial Intelligence on Work-Life Balance for Women Employees in the Academic Sector. In S. Singh, S. Hadoussa, T. Arumugam, & S. Rajest (Eds.), *Multidisciplinary Approaches to AI, Data, and Innovation for a Smarter World* (pp. 253-270). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-9375-8.ch015>
- Alba, A. (2025). *Supporting female nontraditional students in higher education: Exploring instructors and instructor leads' experiences*. Theses and Dissertations. 10740. <https://scholarsarchive.byu.edu/etd/10740>
- Arifah, I. D. C., Hadi, H. K., Dewi, R. S., Dhenabayu, R., & Tanuwijaya, H. (2025). Flexible work dynamics in higher education: unveiling the influence of work engagement and technology adoption on lecturer performance. *International Journal of Organizational Analysis*, 33(9), 3468-3493. <https://doi.org/10.1108/ijoa-11-2024-4995>
- Armstrong-Carter, E., Panter, A. T., Hutson, B., & Olson, E. A. (2022). A university-wide survey of caregiving students in the US: Individual differences and associations with emotional and academic adjustment. *Humanities and Social Sciences Communications*, 9(1). <https://doi.org/10.1057/s41599-022-01288-0>
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540. <https://doi.org/10.3102/00346543055004485>
- Beckwith, N. (2023). Barriers for non-traditional students in higher education. *Educational Research: Theory and Practice* 34(2), 75-79. http://www.nrmera.org/wp-content/uploads/2023/05/V34-2_13-Beckwith_Barriers-for-Non-traditional-Students.pdf
- Blake, M., Jindal, S., & Keleekai-Brapoh, N. (2023). Supporting nontraditional student persistence in practitioner-based programs: A literature review. *College and University, American Association of Collegiate Registrars and Admissions Officers (AACRO)*, 98(1). <https://www.aacrao.org/research-publications/quarterly-journals/college-university-journal/issue/c-u-vol.-98-no.-4-winter-2023>
- Cadete, N., & Ruggunan, S. (2024). Self-Perceptions and Benefits of Psychological Resilience Among Women Academics in the Context of Working in South African Higher Education Institutions (SA-HEIs): A Mixed-Method Approach. *Sage Open*, 14(2). <https://doi.org/10.1177/21582440241256770>
- Charkova, D. A., & Somova, E. (2023). The role of sustainable development in the academic curriculum and prospective employment: a survey of information technology students in Bulgaria. *International Journal of Sustainability in Higher Education*, 24(7), 1629-1647. <https://doi.org/10.1108/ijshe-09-2022-0309>

- Chu, H.-C., Hwang, G.-H., Tu, Y.-F., & Yang, K.-H. (2022). Roles and research trends of artificial intelligence in higher education: A systematic review of the top 50 most-cited articles. *Australasian Journal of Educational Technology*, 38(3), 22–42. <https://doi.org/10.14742/ajet.7526>
- Clair, R. S. (2024). Andragogy: past and present potential. *New Directions for Adult and Continuing Education*, 2024(184), 7–13. <https://doi.org/10.1002/ace.20546>
- Crompton, H., & Burke, D. (2023). Artificial intelligence in higher education: the state of the field. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00392-8>
- Deloitte. (2022). Skills gaps are slowing down AI-workforce integration. *Trends*. <https://action.deloitte.com/insight/2295/skills-gaps-are-slowing-down-ai-workforce-integration>
- El Galad, A., Betts, D. H., & Campbell, N. (2024). Flexible learning dimensions in higher education: aligning students' and educators' perspectives for more inclusive practices. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1347432>
- Ferns, S. J., Zegwaard, K. E., Pretti, T. J., & Rowe, A. D. (2024). Defining and designing work-integrated learning curriculum. *Higher Education Research & Development*, 44(2), 371-385. <https://doi.org/10.1080/07294360.2024.2399072>
- Flaherty, C. (2024, May 22). Awarding credit where it's due. *Inside Higher Ed*. <https://www.insidehighered.com/news/student-success/academic-life/2024/05/22/push-colleges-accept-more-credit-prior-learning#>
- Hahn, M. H. (2020). Pathways to degree completion of female nontraditional students: The role of institutional intervention at a public four-year research institution. [Doctoral dissertation, University of South Carolina]. Scholar Commons. <https://scholarcommons.sc.edu/etd/5802>
- Hanson, M. (2025, February 22). Student Loan Debt by Gender. Education Data Initiative. <https://educationdata.org/student-loan-debt-by-gender>
- Howard, J., Daniel, C., Newman, L., Bond, N., & Romero-Hall, E. (2025). Feminist pedagogy for teaching online (eds.). <https://feministsteach.org>
- Kilgore, W. (2024). Enhancing accessibility and inclusion: The 2024 landscape of credit for prior learning in U.S. and Canadian Higher Education. AACRAO. <https://www.aacrao.org/research-publications/aacrao-research/enhancing-accessibility-and-inclusion-the-2024-landscape-of-credit-for-prior-learning-in-us-and-canadian-higher-education>
- Klein-Collins, R., Bransberger, P., & Lane, P. (2021, October 13). Equity paradoxes in the PLA boost. Prior Learning PLA Landscape Analysis Brief. <https://www.wiche.edu/wp-content/uploads/2021/10/PLA-Equity-Report-CAEL-WICHE-October-2021.pdf>

- Kumari, R., Satyam, S. M., Bairy, L. K., Rehman, A., Shetty, P., & Mohammed, C. A. (2024). Crossing horizons: unraveling perspectives on enhancing medical students' success through at-risk factor exploration. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05819-y>
- Lee, I. (2025). What Makes Adult Learners Persist in College? An Analysis Using the Nontraditional Undergraduate Student Attrition Model. *Education Sciences*, 15(9), 1085. <https://doi.org/10.3390/educsci15091085>
- Leibbrandt, S. (2020). *PLA from the student's perspective: Lessons learned from survey and interview data*. Western Interstate Commission for Higher Education. <https://www.wiche.edu/key-initiatives/recognition-of-learning/pla-student-perspectives/>
- Lin, X. (2016). Barriers and challenges of female adult students enrolled in higher education: A literature review. *Higher Education Studies*, 6(2), 119–126. <https://doi.org/10.5539/hes.v6n2p119>
- Liu, Z., Tang, Q., Ouyang, F., Long, T., & Liu, S. (2024). Profiling students' learning engagement in MOOC discussions to identify learning achievement: An automated configurational approach. *Computers & Education*, 219, 105109. <https://doi.org/10.1016/j.compedu.2024.105109>
- Ma, J., Ma, L., Qi, S., Zhang, B., & Ruan, W. (2025). A practical study of artificial intelligence-based real-time feedback in online physical education teaching. *Smart Learning Environments*, 12(1). <https://doi.org/10.1186/s40561-025-00411-3>
- McNeill, L., & Bushaala, S. (2023). Meaningful connection in virtual classrooms: graduate students' perspectives on effective instructor presence in blended courses. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1271245>
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. Jossey-Bass.
- Murphy, J. S. (2021). Transformational learning theory: A pedagogical framework to encourage social perspective taking in first-year students in post-secondary institutions. *Journal of Campus Activities Practice and Scholarship*, 3(1), 46-51. <https://doi.org/10.52499/2021014>
- National Center for Education Statistics. (2024). *Nontraditional undergraduates/ definitions and data*. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/pubs/web/97578e.asp>
- Raboca, H. M., & Carburnarean, F. (2024). Faculty support and students' academic motivation. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1406611>
- Rose, A. D., Ross-Gordon, J. M., & Kasworm, C. E. (2023). *Creating a Place for Adult Learners in Higher Education: Challenges and Opportunities* (1st ed.). Routledge. <https://doi.org/10.4324/9781003446262>
- Soulami, M., Benchekroun, S., & Galiulina, A. (2024). Exploring how AI adoption in the workplace affects employees: a bibliometric and systematic review. *Frontiers in Artificial Intelligence*, 7. <https://doi.org/10.3389/frai.2024.1473872>

- Stamou, P., Tsoli, K., & Babalis, T. (2024). The role of counseling for non-traditional students in formal higher education: a scoping review. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1361410>
- Sylvester, J. (2025). *Navigating the Journey of Non-Traditional Women in Online Higher Education: A Narrative Inquiry* (Order No. 32114090). ProQuest Dissertations & Theses Global. (3223079889). <https://www.proquest.com/dissertations-theses/navigating-journey-non-traditional-women-online/docview/3223079889/se-2>
- Tiedeman, D. V., & Knowles, M. (1979). The adult learner: A neglected species. *Educational Researcher*, 8(3), 20. <https://doi.org/10.2307/1174362>
- University of Phoenix. (2025). *2025 University of Phoenix Career Optimism Special Report: Moms in the Sandwich Generation*. <https://www.phoenix.edu/career-institute/sandwich-generation.html>
- World Economic Forum. (2025, January 16). *Unlocking human potential: Building a responsible AI-ready workforce for the future*. Jobs and the Future of Work. <https://www.weforum.org/stories/2025/01/unlocking-human-potential-building-a-responsible-ai-ready-workforce-for-the-future>
- Wube, T. B., Asgedom, S. G., Jemal, Z. M., & Gebrekirstos, L. G. (2024). Academic performance and associated factors among female university students. *Global Epidemiology*, 8, 100175. <https://doi.org/10.1016/j.gloepi.2024.100175>
- Yucel, D., & Latshaw, B. (2025). Extra Caregiving Demands, Work-Role Salience, and Psychological Distress Among Employed Parents. *Applied Research in Quality of Life*, 20(1), 347–368. <https://doi.org/10.1007/s11482-024-10415-9>