

Fighting the Forgetting Curve: Enhancing Long-term Retention of Consent Training through Just-in-time Refreshers in Higher Education

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Abstract

Universities have broadly adopted training on sexual consent and respectful relationships for students, yet single-session orientation modules often fail to yield enduring knowledge or behavioural change. Insights from cognitive psychology, particularly Ebbinghaus's forgetting curve, the spacing effect, and the recency effect, reveal why initial training benefits fade and how timely booster sessions might sustain them. This piece explores evidence of training fade-out in university settings and suggests just-in-time refresher interventions to maintain students' understanding and practice of consent and respect education.

Keywords

Consent education; Memory retention; Forgetting curve; Spacing effect; Just-in-time training; Respectful relationships; University policy; Sexual violence prevention.

Introduction

Tackling sexual assault and harassment is common to higher education institutions across the globe. In Australia, the 2017 *Change the Course* report and 2021 National Student Safety Survey highlighted ongoing issues of sexual violence on campuses, pressing universities to enforce mandatory training in consent and respectful relationships (Australian Human Rights Commission, 2017; Universities Australia, 2022). Though well-meant, these single-session programmes often result in knowledge decay long before students leave university (Woodley et al., 2022). Evidence and experience show that early gains in knowledge or attitude fade without reinforcement (Foshee et al., 2000; Hillman, 2021). A question emerges: how can universities ensure that vital principles of respect and safety endure in students rather than deteriorating after a seminar?

To address this, this paper turns to cognitive psychology and educational research. It probes how human memory, prone to swift forgetting as shown by the forgetting curve, weakens retention of training content (Murre & Dros, 2015). From these insights, the paper offers a model of just-in-time refreshers: brief, timely prompts to recall key ideas when they matter most (Thalheimer, 2014). Examples from various industries show that just-in-time interventions strengthen knowledge and performance in critical settings, indicating their potential value for university safety training (Thalheimer, 2014). The argument rests on evidence that steady, periodic education, rather than one-off sessions, builds lasting understanding and shifts culture (Foshee et al., 2000; Hillman, 2021; Woodley et al., 2022).

Theoretical framework

Memory decay and the need for reinforcement

Memory research reveals that new knowledge, fragile and fleeting, fades rapidly without reinforcement. Ebbinghaus's forgetting curve charts this: within days, retention may drop to 10 to 20 per cent of what was initially learned (Ebbinghaus, 1885/1964; Murre & Dros, 2015). The steepest loss comes soon after learning, then slows. This means a 1-hour consent training session at semester's start may leave students with mere fragments of content when facing real-world choices

later (Thalheimer, 2014; Woodley et al., 2022). Without deliberate efforts to bolster memory, what is not revisited may be lost.

Cognitive psychology points to remedies. Ebbinghaus noted in 1885 that spaced reviews curb forgetting. Each revisit resets the forgetting curve, refreshing memory (Thalheimer, 2014). By contrast, single-session learning, however well-crafted, allows the loss of knowledge as time passes (Murre & Dros, 2015). For consent education, this suggests repeated prompts or refreshers over weeks and months could markedly increase students' knowledge retention (Woodley et al., 2022).

A refresher could take the form of a brief interactive quiz embedded in the event ticketing process or a short scenario-based prompt and response prior to entry. Such light but active engagement stimulates memory and reinforces behavioural norms just before moments of risk. This could be seamlessly incorporated into the digital infrastructure already used by students. For instance, a mandatory 1-minute module on consent principles could appear at the point of ticket confirmation or as a pop-up during QR code check-in. A correct response could unlock the ticket or activate the QR code, while incorrect answers would trigger a brief feedback message and a retry option. This approach balances efficiency with cognitive reinforcement,¹ ensuring students re-encounter core messages at the precise moment of relevance, without needing to enrol in a full-length module.

Another principle, the recency effect, ties to the serial position effect² in memory (Cherry, 2024). Fresh material lingers in working memory, ready to hand, until new information pushes it aside or time passes. In practice, if students revisit a skill or idea just before they need it, they recall it more accurately (Thalheimer, 2014). Timing counts: the nearer the training or prompt to the moment of need, the stronger the chance students will hold and use the knowledge (Cherry, 2024; Thalheimer, 2014). To leverage the recency effect means aligning learning with the natural rhythm of life's demands, structuring study or reflection so that new insights are reinforced and recalled when they are most relevant to current experiences.

In addition to the forgetting curve, other effects help explain the phenomenon: the spacing effect and the recency effect illustrate why single-session training programmes often fail and how they can be improved (Murre & Dros, 2015; Thalheimer, 2014). The forgetting curve shows how memory retention declines over time without reinforcement, the spacing effect highlights that revisiting material at intervals enhances long-term recall, and the recency effect explains that information encountered most recently is remembered best. By planning regular refreshers (spacing) and offering content at timely moments (recency), we can counteract memory's natural decline. The goal is to keep essential knowledge active in students' minds. Many institutions, for example, require first-year students to complete an online consent module such as Consent Matters or attend an orientation workshop (Woodley et al., 2022). Students engage with scenarios, consent laws, communication, and respectful relationships, often scoring well on immediate quizzes. Yet, by the next term, many only dimly recall the training or forget it entirely (Hillman, 2021; Woodley et al., 2022).

Campus observations confirm this. Critics of the Consent Matters module note that a single course rarely brings lasting change in knowledge or behaviour, lacking reinforcement (Woodley et al., 2022). Wider reviews of respectful relationships education agree that standalone programmes fail as

¹ *Cognitive reinforcement* is the process of strengthening a learner's memory and understanding of a concept by strategically re-exposing them to key information.

² The *serial position effect* is a psychological principle stating that when a person is given a list or sequence of information, they are most likely to remember the items at the *beginning* and the *end* of that sequence. The items in the middle are the most likely to be forgotten.

enduring solutions, even cited as what not to do in prevention (Hillman, 2021). Evidence consistently shows that initial awareness often diminishes without reinforcement (Asia-Pacific Student Accommodation Association, 2024).

Evidence of training decay in higher education

Research tracking student learning and behaviour after sexual violence prevention programmes paints a stark picture of training decay, which refers to the gradual loss of knowledge and behaviour change over time following a learning intervention. Many studies show strong early gains but fading effects as time passes (Foshee et al., 2000; Vladutiu et al., 2011). The Safe Dates programme, used in secondary schools, initially showed promise: students gained knowledge about dating violence and reported less abuse soon after participation (Foshee et al., 2000). Yet, a year later, while some attitudinal improvements such as healthier norms and greater resource awareness persisted, the gap in actual behaviour between participants and control groups disappeared. The researchers recommended booster sessions to sustain impact, noting that their absence weakened long-term outcomes (Foshee et al., 2000).

Quantitative evaluations confirmed this pattern, as short-term behavioural improvements seen at 1 month were no longer evident at 12 months, although positive changes in mediating factors like norms, conflict management skills, and service awareness remained (Foshee et al., 2000). A longer follow-up from the same trial found that 4 years after the programme, the intervention group still showed significantly lower physical, serious physical, and sexual dating violence perpetration and victimisation compared with controls, while a mid-trial booster added no further benefit (Foshee et al., 2005).

A recent meta-analysis of 80 studies (385 effect sizes) found that in higher education settings, campus sexual assault prevention programmes yield small but significant effects on victimisation ($g \approx 0.15$) and non-significant effects on perpetration (Kettrey et al., 2023). This indicates that behaviour change tends to be limited and that initial gains may fade without reinforcement. Together, these results suggest early benefits can diminish over time absent ongoing contact, and they underscore the rationale for periodic refreshers.

When universities assess mandatory sexual assault prevention training, they often see knowledge and vigilance wane as time passes (Hillman, 2021; Woodley et al., 2022). First-year students taking a consent module in semester one may, by the next year, show lower quiz scores or confidence unless further training intervenes. Some studies find final-year students, years removed from their last training, perform no better in scenario assessments than those never trained, suggesting much is forgotten or no longer shapes behaviour (Hillman, 2021). A United Kingdom (UK) study by Hillman (2021) found that most final-year students viewed a single lesson as inadequate, with 58 per cent believing a consent assessment before university should be mandatory, signalling a call for baseline knowledge. The Higher Education Policy Institute (HEPI) report *Sex and Relationships Among Students: Summary Report* indicated that approximately two-thirds of students (26% strongly agree and 41% slightly agree) supported having opportunities to learn about sex and relationships throughout the academic year (Hillman, 2021).

Programmes with multiple sessions or follow-ups yield stronger results, though decay still creeps in (Vladutiu et al., 2011). A meta-analysis of sexual violence prevention programmes found longer interventions often yield better early outcomes than single sessions but, without regular reinforcement, even these fade over time (Vladutiu et al., 2011). Australia's *National Plan to End Violence Against Women and Children 2022–2032* urges universities to offer training that builds understanding over time, not just through a single session (Department of Education, 2024). Likewise, the legislatively enacted *National Higher Education Code to Prevent and Respond to*

Gender-based Violence (Department of Education, 2025) sets standards for ongoing prevention education, mandating yearly training for students and staff, as it became law in 2025 (Department of Education, 2025). Universities have begun to follow and introduce yearly modules and targeted refreshers for groups like student leaders in residential colleges (Burge et al., 2025).

While the forgetting curve describes how knowledge degrades without reinforcement, the spacing effect identifies how distributed practice can counteract this decline. However, neither fully accounts for how beliefs and behaviours evolve over time. Consent education is not merely a cognitive task; it is rooted in values, social norms, and interpersonal ethics. Shifting behaviour, particularly in emotionally and morally complex situations such as sexual encounters, requires more than information. It requires internalisation. Therefore, refreshers should be designed not only to prompt memory but also to reaffirm attitudes, strengthen ethical reasoning, and sustain commitment to respectful conduct. This aligns with critiques of single-session modules, which may raise awareness but often fail to embed lasting behavioural change unless combined with repeated, reflective engagement (Hillman, 2021; Woodley et al., 2022). The just-in-time approach, though grounded in memory theory, is proposed here as one part of a broader educational and cultural strategy that supports emotional learning, ethical reflection, and the reinforcement of community norms over time.

Just-in-time refreshers

Concept and cross-industry case studies

Just-in-time training delivers knowledge or practice at the moment of need, immediately before use. Used in high-stakes fields to improve performance and safety, it offers a model for strengthening consent education retention (Thalheimer, 2014).

In workplace safety, brief daily meetings, often called toolbox talks or tailgate meetings, start each shift. These 5–10-minute refreshers highlight that day’s hazards and protocols. Construction studies show crews with regular pre-shift briefings sustain fewer injuries, as the talks sharpen focus on safe practices and curb complacency before a hazard arises (Hinze, 2005). High-reliability organisations, such as those in aviation, mining, or oil drilling, operate in complex, high-risk environments where even small errors can have serious consequences. These organisations regard daily refreshers as vital, with evidence showing they sharply reduce risk (Carayon et al., 2006). In the context of consent education, a quick prompt on respect and safety before key events could mirror this approach. While relationships involve greater emotional nuance than operational hazards, the format of toolbox talks offers a useful delivery model. In a university setting, a short reflective message or discussion prompt before social events could encourage students to consider themes of mutual respect, communication, and safety. Delivered in a calm, non-intrusive manner, this form of timely engagement draws on the strength of just-in-time learning to reduce complacency and support ethical decision-making in emotionally charged or high-risk contexts.

In military and aviation, just-in-time preparation is embedded in practice. Mission briefings and immediate-action rehearsals immediately precede operations; as stress or time can impair retention of details, timely cues can avert deadly errors (Dekker, 2011). The World Health Organization’s *Surgical Safety Checklist* in hospitals has cut complications and deaths by refreshing teams’ recall of critical steps at the moment of action (Haynes et al., 2009). Even experts benefit from last-minute prompts. For students, a pre-event checklist on respectful conduct could do the same.

Medicine offers more proof. During the COVID-19 pandemic, hospitals faced shifting protocols. In situ simulations—timely hands-on training just before application—brought near-perfect compliance (Lababidi et al., 2020). Participants said immediate, context-specific training proved more effective than abstract modules taken weeks before. Likewise, regular rolling refreshers for

cardiopulmonary resuscitation (CPR) and other life-saving skills sustain proficiency far better than infrequent, one-off certification courses (Meaney et al., 2012). These findings show that spaced, just-in-time learning enhances retention and application, demonstrating that timing and context are critical for lasting skill development.

In education, just-in-time learning is also effective. Teachers use warm-up quizzes or revision tasks at lessons' commencement to awaken prior knowledge and prime students for new material. Studies show that periodic retrieval practice, such as low-stakes quizzes spread over time, produces far better long-term recall than attempts to activate knowledge in a single intensive session (Roediger & Karpicke, 2006). This evidence supports brief, timely refreshers—even in academic settings—to strengthen memory and ready learners to apply ideas.

Across these fields—industry, military, healthcare, and education—just-in-time interventions use the spacing effect through multiple touchpoints and the recency effect through timely prompts to enhance real-world results. Fewer accidents, better compliance, higher test scores, and stronger skill retention all substantiate a clear case for just-in-time models in university consent education (Thalheimer, 2014).

Implementing just-in-time refreshers in universities

The implementation of just-in-time refreshers can be approached through four interconnected strategies. The first is digital integration, which embeds short prompts into existing systems such as event ticketing platforms or learning management systems. The second is live event-based prompts, where reflective messages or checklists are delivered immediately before high-risk events. The third is communication channels, such as text messages, emails, or app notifications timed to student routines. The fourth is peer and community reinforcement, where student leaders and organisers embed reminders into the wider culture of student life. These strategies are complementary rather than standalone, and together they ensure consistency, repetition, and visibility across the student experience.

1. Digital integration

Event ticketing platforms make just-in-time refreshers highly practical. For instance, to join a concert or society party, students might answer a short question such as, *True or false, can someone legally consent while intoxicated?* This ensures near-universal completion while embedding core ideas actively and aptly (Hillman, 2021). Universities can also link training modules to ticket confirmation or QR code activation; for example, requiring a 1-minute scenario-based quiz or checklist before entry. This model ties memory prompts directly to attendance, making them timely, efficient, and effective.

2. Live event-based prompts

Brief prompts delivered in person can also reinforce respectful conduct. Event organisers might begin with a short message such as, *Before the music starts, we look out for each other; if someone feels uneasy or in trouble, step in or seek help.* Some colleges run pre-weekend floor meetings in halls to remind students to support one another. Universities may also require a 10-minute online scenario module before large events, such as an intervarsity sports tournament, helping students recall consent principles at the precise moment they are needed (Roediger & Karpicke, 2006).

3. Communication channels

Simple reminders delivered through existing communication systems can be highly influential. Text messages, emails, or push notifications sent before weekends or major events can prompt students

to stay with friends, check on each other, and keep consent central to any sexual activity (University Colleges Australia, 2024). Where possible, universities can align these reminders with calendars or location-based triggers to maximise timeliness and relevance. Regular low-stakes quizzes, gamified challenges, or microlearning prompts delivered via apps or portals can also sustain engagement over time.

4. Peer and community reinforcement

Finally, peer leaders, residence advisors, and student societies can reinforce safety messages by embedding them into community life. Microlearning with gamified touches or peer-led reminders enhances engagement and reduces resistance. Framing refreshers as supportive tools rather than strict rules helps students see them as part of a shared duty of care (University Colleges Australia, 2024). Student leaders are especially powerful in normalising such practices, shaping peer norms so that refreshers become part of everyday culture rather than isolated requirements.

Together, these approaches ensure that just-in-time refreshers do more than jog memory: they embed consistent messaging across digital platforms, live events, communication channels, and community networks. This multi-layered strategy positions refreshers as both cognitive reinforcements and cultural touchpoints, supporting the development of a campus-wide culture of safety.

Legal considerations for mandatory refreshers

From a legal and regulatory perspective, universities hold both broad discretion and an increasing duty to provide safety training for students. In many jurisdictions, mandating regular training aligns with existing compliance obligations and emerging policy trends. In the United States, the Campus Sexual Violence Elimination Act (2013) requires sexual violence prevention training for new students and staff, with ongoing education for those enrolled. Several states, such as Illinois and New York, have introduced yearly training requirements, while the University of California system mandates annual refreshers following an initial first-term course. Non-compliance may result in registration holds, demonstrating that linking enrolment or access to training completion is legally defensible (Henry, 2024). Requiring a pre-event refresher for attendance narrows this logic. If universities can mandate an alcohol safety module for residence eligibility, they can require a consent refresher for campus events. Courts generally back such measures, if applied fairly and without bias (Cantor et al., 2017).

In Australia, the legal landscape is shifting to require ongoing and proactive prevention measures. The legislatively enacted *National Higher Education Code to Prevent and Respond to Gender-based Violence* lays down national standards, requiring yearly training for students and staff to build knowledge over time (Department of Education, 2025). Though event-based refreshers are not yet required, universities adopting them align with the Code's spirit and meet their duty of care.

Failing to reinforce consent education might be seen as institutional neglect. By requiring brief refreshers before events, universities can demonstrate that they took reasonable steps to prevent harm. This could lessen liability and align with new policy reforms (Department of Education, 2024).

Enforcing mandatory refreshers

Practical and legal considerations

Enforcing refreshers brings practical and legal questions, such as how universities ensure only compliant students enter events. Checking student ID cards against a database at the door or linking

completion to ticket QR codes is a possible solution (University Colleges Australia, 2024). Policies must state that students who have not completed training will be denied entry, much like barring graduation for unpaid fees or classes for missed orientation (Cantor et al., 2017). Student event organisers, like clubs or societies, need university support to enforce rules without confusion or unfairness at entry (University Colleges Australia, 2024).

External guests at events are another factor to consider. In the United States, universities are legally permitted to set behavioural conditions for external attendees, with many requiring them to follow campus conduct policies (Cantor et al., 2017). This may include guests signing a statement or viewing a short video on expected behaviour upon entry. From a contractual and regulatory perspective, universities are within their legal rights to require such training as a condition of voluntary event participation. No laws prohibit this practice, and growing legal and policy expectations continue to encourage institutions to act decisively against sexual misconduct (Henry, 2024).

General legal principles such as accessibility and privacy also apply. In the United States, privacy laws require careful handling of data related to training completion. When this information is treated as an internal educational record, it is generally permissible (Meyer, 2022). Universities should nonetheless seek legal counsel to ensure that any new requirements align with student rights and institutional policies. Some critics have raised concerns about *compelled speech*—a United States constitutional concept referring to being legally required to express or engage with certain messages—arguing that students have a right to avoid the material. However, because the training’s purpose is to promote safety and participation in events remains voluntary, such objections carry limited legal weight (Meyer, 2022).

In sum, legal frameworks increasingly back ongoing, just-in-time training as part of university duties. Implementing this with clear communication, technology, and fair enforcement reduces legal risks. Universities strengthen their standing by meeting standards and showing good-faith efforts to prevent harm, which regulators and courts are likely to uphold (Henry, 2024).

Ethical considerations

Mandating just-in-time refreshers raises ethical questions around student autonomy, the risk of trauma, inclusivity, and the university’s true intent. Balancing autonomy with compliance is central to ethical practice (Department of Employment and Workplace Relations, 2022). Requiring refreshers compels students to engage with material they might otherwise object to, creating potential for resistance. For instance, a Warwick student publicly criticised mandatory consent and healthy relationships sessions, describing them as patronising and unnecessary (Haghighi, 2023). Universities therefore need to communicate clearly why such training is compulsory, recognising students as adults entitled to transparency and respect (Meyer, 2022). Framing the training as a shared duty of care, rather than a top-down directive, helps position it as a mutual commitment to safety and wellbeing (Department of Employment and Workplace Relations, 2022).

Trauma matters too. Discussion of sexual assault and consent can be unsettling, especially for survivors (Gao et al., 2023). Ethically, universities must offer opt-outs or alternatives. Many already allow survivors to meet a counsellor privately or complete a different task if the standard module is potentially traumatising (Gao et al., 2023). A student in trauma therapy might skip a pre-event module for a one-on-one briefing in a safe setting (Department of Employment and Workplace Relations, 2022). Content needs warnings, such as “this module speaks plainly of sexual consent and assault” (Meyer, 2022).

Refreshers must be meaningful. A dull slideshow, clicked through in boredom, quickly loses its educational purpose and fails to reinforce learning (Gao et al., 2023). Universities have a

responsibility to make refreshers engaging, using realistic scenarios, updated information, and prompts that stimulate reflection. A short, interactive quiz can be more ethically sound and educationally effective than a lengthy video that students ignore (Department of Employment and Workplace Relations, 2022). If data indicate that refreshers are ineffective, they should be redesigned to respect students' attention and engagement (Meyer, 2022). Continuous improvement demonstrates that the university prioritises genuine outcomes over appearances, strengthening trust in its leadership (Department of Employment and Workplace Relations, 2022).

Equity, inclusion, and the path from compliance to consent culture

Equity and inclusion must shape refresher programmes. A one-size-fits-all format risks excluding students with limited digital access, disabilities, or varied learning needs. Alternatives, including in-person briefings, hardcopy options, and screen reader-compatible formats, prevent unintended bias (Gao et al., 2023; Meyer, 2022). Commuter students, online learners, and regional students must be included, even if the nature of their events may differ. Ethical practice leaves no group behind, as omissions may enable misconduct to persist (Department of Employment and Workplace Relations, 2022).

When content reflects students' lives, including gender diversity, cultural backgrounds, and non-heteronormative relationships, they engage more meaningfully and deeply (Gao et al., 2019). Narrow narratives, such as portraying men solely as perpetrators and women as victims, can alienate or reinforce stereotypes. Inviting diverse student voices to co-design modules represents best practice, fostering agency and ensuring training reflects real lived experiences (Department of Employment and Workplace Relations, 2022).

The deeper ethical shift lies in moving from compliance to care and consent, where students, not institutions, internalise a shared responsibility for safety and respect rather than acting out of fear of penalty. Peer-led stories and discussion prompts help cultivate understanding and commitment. Students might recount experiences of stepping in as bystanders or reflect on what a respectful campus means. These approaches humanise training, reframing the message from *you must* to *we value this together* (Universities Australia, 2022). Some UK universities take a whole-community approach, training students, staff, and leaders who make public pledges. This reduces the sense of top-down enforcement and builds shared ownership. When student leaders or club presidents publicly endorse training, saying *we support this; we've seen why it matters*, perceptions shift, becoming consistently embedded within campus structures and practices (Haghighi, 2023).

Addressing challenges and ensuring sustainability

Of course, challenges remain. Student apathy and "training fatigue" are genuine concerns, as excessive modules can lead to disengagement. The solution lies in variety, brevity, and incentive. Refresher formats should rotate, for instance through a quiz, a short video, or a gamified challenge. Friendly competitions within residence halls, such as awarding a pizza party to the first floor to reach full completion, can also boost participation without coercion (University Colleges Australia, 2024).

Logistical burdens present another challenge. Planning and deploying just-in-time interventions requires administrative time and coordination. Universities will need to invest in automation tools and additional staff capacity. Coordination between student services, information technology (IT), and residential teams is essential. While tracking impact is difficult, proxy indicators, such as increased confidence to intervene or knowledge retention in follow-up surveys, can provide useful insights. Relying solely on module completion rates is misleading; qualitative student feedback and broader climate measures should guide continuous improvement (Our Watch, n.d.).

Personalisation is a further frontier. Ideally, different students would receive tailored reminders depending on their social, residential, or academic context. While this is resource-intensive, even modest steps—like syncing refreshers with known high-risk dates (e.g., orientation week, Halloween, exam stress periods)—can maximise relevance (Thalheimer, 2014).

Despite these obstacles, the momentum is clear. The Australian higher education sector, through Universities Australia and University Colleges Australia, has committed to ongoing training as part of their 10-point action plans following national surveys. The debate is no longer whether we should go beyond one-off training, but how to do it well (Universities Australia, 2022).

Emerging scholarship reinforces this trajectory. Burge et al. (2025) documented a university-wide respectful and inclusive placements programme designed to prepare students for internships, ensuring they knew how to respond to sexual harm in off-campus settings. Their findings support the integration of consent education across all student experiences, not just during orientation.

From a cognitive perspective, the need for reinforcement is undeniable. Without spacing and recency, memory fades. Just-in-time training offers a scientifically grounded solution: multiple exposures timed to moments of relevance. Orientation alone cannot produce lasting change. It must be part of a broader, evolving strategy.

Ethical practice demands empathy and respect at every turn: for students' time, with concise, effective training; for their minds, with clear reasons; for their pasts, with alternatives; for their diversity, with inclusive content and design.

Conclusion

The evidence in support of just-in-time refreshers is compelling. Training effects often decay over time, as seen in programmes such as Safe Dates, which delivered promising short-term outcomes that faded within a year without reinforcement (Foshee et al., 2000). In higher education, annual or repeated consent training is a positive step, yet emerging Australian policy directions and institutional practice highlight the need for more frequent, context-specific interventions (Department of Education, 2024; Universities Australia, 2022).

The four-part framework presented in this paper shows how such interventions can be embedded across the student experience. Digital integration links consent principles directly to systems already used by students, such as ticketing and learning platforms. Live event-based prompts situate reminders in the immediate context of social gatherings, sports, or college activities. Communication channels use texts, emails, or app notifications to provide timely nudges aligned with student routines. Finally, peer and community reinforcement empowers student leaders and societies to embed messages into the culture of campus life.

Together, these strategies move consent education from one-off training to continuous cultural reinforcement. They embed values of safety, respect, and shared responsibility in multiple layers of student life, positioning refreshers not only as cognitive reinforcements but also as cultural signals. Using a public health analogy, initial consent training can be viewed as the first vaccine dose, while just-in-time refreshers act as boosters that maintain protection over time. While other measures such as survivor support, fair disciplinary systems, safer campus design, and campaigns to challenge harmful norms remain essential, refreshers ensure that the foundations of consent and respect are reinforced consistently.

Looking ahead, the key will be refining the frequency, tone, and delivery of refreshers, combining serious content with engaging methods to sustain effectiveness and avoid fatigue. Cross-institution collaboration, pilot testing, and longitudinal evaluation will be essential in identifying best practice. Encouragingly, peak bodies such as the Asia-Pacific Student Accommodation Association

(APSAA) and University Colleges Australia are already fostering these sector-wide discussions, providing momentum and collective expertise (Burge et al., 2025; University Colleges Australia, 2024).

Reinforcing consent and respectful relationships education through just-in-time interventions offers a practical, evidence-informed approach to combat cognitive decay and embed cultural change. By combining spacing and recency effects with consistent institutional messaging, universities can strengthen both knowledge and values. The investment in ongoing, well-timed education is ultimately an investment in safer, more respectful campus communities for the future.

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