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The Wartime University: The role of higher education in civil readiness

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Executive summary

As the UK faces rising global insecurity, its higher education institutions must be recognised not as peripheral actors but as vital components of national resilience. With their scale, civic embeddedness and breadth of expertise, UK universities represent a 'composite capability' spanning defence, public health, skills, logistics and democratic stability. Yet this capability remains under-leveraged and poorly integrated into national preparedness.

Historically, higher education institutions played overt wartime roles by supplying officer cadets, advancing weapons technologies and producing strategic intelligence. While that tradition continues through the University Officers' Training Corps (UOTCs), the Army Higher Education Pathway (AHEP) and defence partnerships at King's College London, it now forms just one part of a wider and more complex landscape. This paper argues that today's universities have the capacity to support a full-spectrum civil defence strategy. It highlights examples from across the full range of UK higher education institutions to demonstrate how the sector is already building the infrastructure for national readiness.

Ukraine offers a compelling contemporary case: its universities have served as shelters, aid hubs, research centres and diplomatic platforms in wartime, a model the UK higher education sector could exceed given its greater scale and integration.

The current risk is not a lack of capacity but a lack of coordination. Without explicit integration into UK emergency planning frameworks, the sector's potential will remain fragmented. Policymakers must now act strategically to mobilise higher education institutions as assets of national security and democratic continuity.

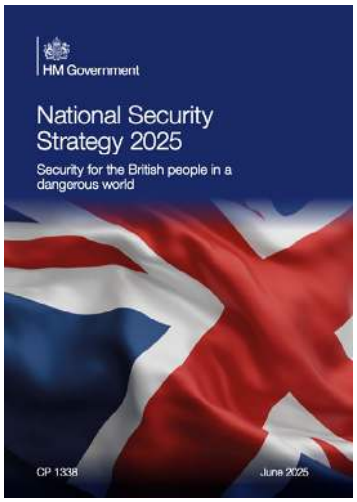
Introduction

The 2020s have seen a marked escalation in the likelihood and intensity of inter-state conflict. The World Economic Forum's *Global Risks 2024* identified Ukraine, Israel and Taiwan as key geopolitical flashpoints. By mid-2025, two of these regions are in open warfare, while Taiwan faces mounting military tension.[1] With Operation Midnight Hammer in June 2025 (a direct US strike on Iranian nuclear facilities), great power conflict has re-entered global reality.

In response, Prime Minister Sir Keir Starmer announced that the UK was 'moving to warfighting readiness' to 'defend our homeland'.[2] For UK higher education institutions, this shift poses deep disruption: the sector depends on international students, global research flows and transnational networks. But it also opens an urgent opportunity. As engines of research, skills and civic trust, UK universities are strategically positioned to support national resilience, yet this potential remains under-recognised and under-utilised.

The UK Government's *National Security Strategy 2025* affirms higher education as a core national strength. In the same paragraph as it outlines the UK's commitment to NATO's principles of mutual security and continued participation in the development of next generation fighter aircraft through the Global Combat Air Programme, this strategy highlighted the importance of 'cultivat[ing] existing national strengths across the Union, such as our … higher education sector'.[3] But this recognition remains rhetorical. There is as yet no systematic policy approach for integrating higher education institutions into the UK's emergency planning and national readiness frameworks.

This paper explores what a 'wartime university' could mean in the 21st century. It examines historical UK precedents, the live case of Ukraine, and current UK sector capacity. Its central argument is that higher education institutions are not just vulnerable to conflict. They are indispensable to national defence and democratic continuity, if strategically mobilised.



National Security Strategy

Historical precedents

Despite their smaller size and narrower remit compared to today, UK universities played a disproportionately large role in national war readiness during the 20th century, particularly in the First and Second World Wars.

In the First World War, universities served as critical sources of officer candidates. Tens of thousands of British university students enlisted throughout the course of the war, with approximately 15% to 20% of those enlisted from UK universities not returning.[4] University Officers' Training Corps (UOTCs) quickly evolved into formal pipelines, converting over 30,000 students into military personnel within eight months.[5] Beyond supplying manpower, universities supported military operations through their disciplines. The Royal Navy's 'Surgeon Probationers' programme enlisted medical students to address shortages at sea, while Cambridge chemists worked with the Ministry of Munitions to produce mustard gas.[6] More than being affected by the war, universities were central to its execution.

East Midlands Universities' Officer Training Corps by Andrew Abbott

This pattern intensified during the Second World War. UOTCs again supplied officer candidates, but universities also became critical sites of scientific innovation. At Birmingham, physicists developed the cavity magnetron, revolutionising radar and contributing directly to victory in the Atlantic and air campaigns.[7] Cambridge mathematicians played a central role at Bletchley Park, cracking the Enigma code and advancing early computing.[8] Meanwhile, institutions also served humanitarian functions, offering refuge and academic appointments to Jewish scholars fleeing Nazi persecution.[9]

In both conflicts, UK higher education institutions were visible, militarised and instrumental to the national war effort. They trained leaders, advanced battlefield technologies and helped define Britain's moral and strategic position.

The current higher education sector

The overt militarisation of universities seen in past conflicts may seem incompatible with the values of modern higher education, particularly academic freedom, institutional neutrality and internationalism. Yet the UK's 21st-century higher education sector is not merely larger than its 20th-century counterpart; it is also more integrated into national infrastructure and civil society. This transformation expands, rather than diminishes, its relevance to national resilience.

In 2025, the UK hosts over 260 registered higher education providers (compared to just 19 in 1914) educating 2.9 million students, including more than 730,000 international learners. The sector employs nearly 400,000 staff, nearly half in non-academic roles, reflecting its evolution into a complex ecosystem of expertise, logistics and services.[10]

More significant than growth is diversification. The modern HE landscape spans research-intensive Russell Group institutions, post-92 civic universities, specialist colleges and FE-based providers. Learning now includes degrees, apprenticeships, short courses and fully online programmes that are delivered by a range of academic, industry and clinical professionals. Universities routinely partner with

NHS trusts, local authorities, national regulators and civil society bodies. They underpin regional economies, maintain vital communication networks and command public trust.

In short, UK universities are no longer peripheral to civil society, they are embedded within it. Their distributed, multi-functional structure offers a latent capability for civil defence, public coordination and democratic continuity. The real challenge is not whether they could be mobilised, but whether government strategy is prepared to support and integrate that mobilisation effectively.

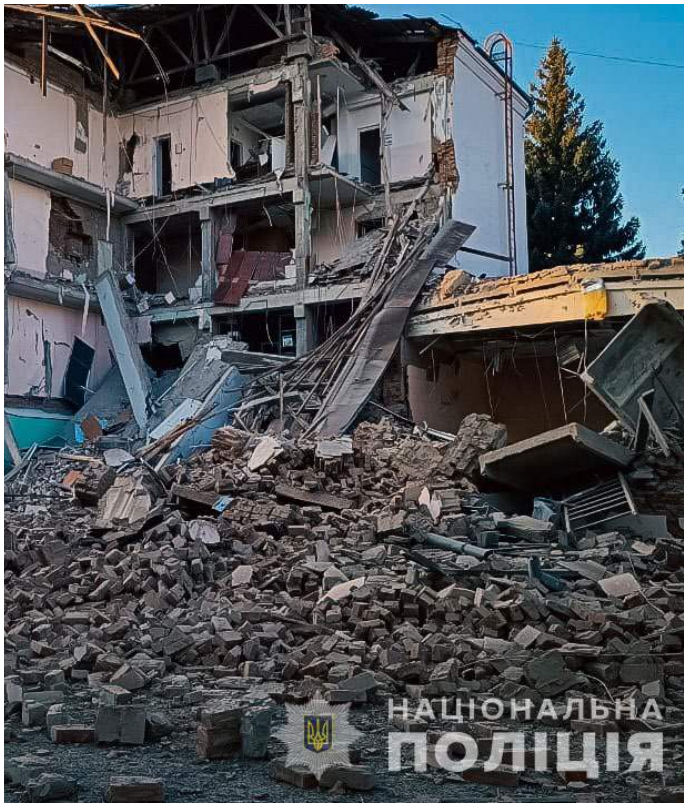
The Ukrainian example

Since Russia's invasion in 2022, Ukrainian universities have demonstrated how higher education can function as a pillar of national resilience. While echoing the traditional wartime roles of personnel training and strategic research, their contribution has expanded into the civic, diplomatic and psychological domains and, in doing so, has showcased the breadth of a modern 'wartime university.'

Just as UK universities once supplied personnel and expertise during the world wars, Ukrainian institutions have contributed materially and strategically to national defence. The Kyiv School of Economics (KSE), for example, has played a central role in documenting the war's damage through its Russia Will Pay project.[11] This initiative combines legal, economic and satellite data analysis to build the evidentiary foundation for future reparations claims, providing a clear example of how academic expertise can feed directly into national legal and diplomatic strategy.

Yet it is outside the explicitly military sphere where Ukraine's higher education sector most vividly illustrates the expanded civil function of universities during wartime. Institutions have operated as local coordination hubs, shelters and sources of continuity. Sumy State University, under siege in early 2022, sheltered hundreds of foreign students trapped by the fighting, while other campuses served as distribution centres for food, medical aid and psychological support.[12] Across the country, universities have preserved not only infrastructure but also cultural identity and civic function, acting as stabilising institutions in moments of extreme disruption.

Perhaps most striking is the role played by transnational university partnerships. Ukraine's globally connected academic networks enabled it rapidly to activate support systems beyond the reach of traditional diplomacy. The UK's #TwinForHope campaign, launched in partnership with Universities UK International, has led to over 100 institutional twinnings between UK and Ukrainian HEIs.[13]



A building at Sumy State University after a Russian bombing on 3 September 2024 by National Police of Ukraine

- The University of Hull, for example, partnered with Mariupol State University, which had been displaced to Kyiv after its campus was destroyed. Hull raised over £15,000, secured further funding from Research England, donated lab and IT equipment and supported academic continuity through English-language training and staff development.[14]
- The University of Sheffield twinned with Kyiv Polytechnic Institute (KPI), donating £20,000 for the construction of bomb shelters to ensure in-person teaching could resume in relative safety. Sheffield also provided access to digital learning platforms and donated key IT resources to sustain research activity.[15]
- These institutional alliances have in some cases developed into joint research projects, such as the University of Hull and Mariupol State University's collaboration on community-led urban recovery planning, with co-funded work exploring post-war civic redevelopment.[16]

These efforts demonstrate that modern universities are not just observers of conflict nor simply exporters of humanitarian goodwill. They are active geopolitical actors, capable of convening resources, shaping narratives and reinforcing alliances through knowledge and trust. In this sense, they operate as nodes within international resilience networks, bypassing state bureaucracy and leveraging academic relationships to deliver support quickly and credibly.

Ukraine's higher education response to the war thus offers a powerful case study of what the contemporary 'wartime university' can be: a platform for civil defence, a conduit for international collaboration and a strategic instrument for rebuilding the democratic and civic fabric of a nation under siege.

UK higher education: a composite asset for civil resilience

The UK's higher education sector represents a strategic but under-leveraged national asset for civil and defence readiness. Its scale, diversity and embeddedness in civic, economic and international networks provide a composite capability that extends far beyond traditional military functions and encompasses defence research, social infrastructure, psychological resilience and democratic continuity.

Direct support for military capacity remains active. Nineteen University Officers' Training Corps (UOTCs) deliver leadership development to students, many of whom commission into the armed forces.[17] The Army Higher Education Pathway (AHEP) partners with institutions like Henley Business School to provide in-service qualifications embedded in defence career progression.[18] At the strategic level, King's College London delivers postgraduate education through the Defence Academy, helping shape defence thinking and doctrine.[19] Over 100 post-compulsory educational institutions have also signed the Armed Forces Covenant, formalising their commitment to supporting armed forces personnel within civilian society.[20]

Yet the sector's broader potential lies in its diversity. From research-intensive institutions to post-92 universities, specialist colleges and online providers, UK higher education institutions offer distributed capabilities that could underpin a whole-society approach to resilience. This includes civic coordination, behavioural insights, health infrastructure, food security and education continuity. Four thematic domains stand out.

1. Democratic and informational resilience

Universities are not only producers of research but also curators of democratic discourse. As information warfare and political instability become integral features of conflict, higher education institutions serve as bulwarks of truth and civic engagement.

In April 2025, the University of Nottingham facilitated a cross-sector symposium on democratic resilience, combatting misinformation and maintaining political stability that brought together academic specialists, elected representatives and third sector leaders, demonstrating the potency of higher education institutions to sit at the intersection of different aspects of civil life.[21]

Similarly, the UK government's Behavioural Insights Team (BIT), informed by academic expertise from domestic and international higher education institutions, now operates as a global authority on behavioural science and crisis communication.[22] Its work on vaccine uptake, trust-building and behavioural nudges demonstrates how UK academic expertise shapes societal response to national emergencies.

2. Health security

Public health has re-emerged as a security frontier, and universities are central to its defence. The London School of Hygiene & Tropical Medicine (LSHTM), in partnership with the UK Health Security Agency, co-leads the UK Public Health Rapid Support Team, a unit deployable to epidemic outbreaks worldwide. LSHTM also hosts PhD programmes linked to national health infrastructure, ensuring sustained capability development.[23]

Within the same field, the Liverpool School of Tropical Medicine (LSTM) plays a vital role in projecting health security internationally. Unencumbered by the large-scale government partnerships of LSHTM, LSTM operates with notable agility, partnering with locally embedded hubs across regions such as sub-Saharan Africa. In one example, its partnership with the Malawi-Liverpool-Wellcome Programme has enabled rapid training and deployment of clinical staff during outbreaks of cholera and Ebola.[24] Through such initiatives, LSTM shows how higher education institutions can act as an extra-governmental conduit for UK soft power, delivering targeted interventions that bolster epidemic preparedness and public health resilience beyond formal state channels.

Elsewhere, universities contribute to the health and psychological dimensions of wartime resilience. For example, the University of Derby's degree apprenticeships in Prosthetic and Orthotic practice have leveraged the university's professional connections to incorporate expertise from industry and deliver a module focusing explicitly on veteran health and care for those injured in armed conflicts.[25]

3. Food security and environmental stability

Disruption to supply chains, weather volatility and blockades can make food security a critical wartime concern. Oxford's Department of Plant Sciences, in collaboration with Rothamsted Research, has developed the T6P pathway enhancer, a breakthrough in increasing

wheat yields with major implications for global food security, particularly relevant in the context of climate stress or wartime disruption to supply chains.[26]

4. Crisis education, continuity, and social infrastructure

The continuity of learning and coordination of community services are crucial under wartime conditions. Universities with mature online provisions and expertise in low-bandwidth, asynchronous distance education such as The Open University, Arden University and the University of Derby provide a model for educational resilience that is applicable to both displaced students and military personnel in deployment.[27]

Universities also act as civic coordination nodes. During the Ukraine conflict, many campuses have become shelters and aid distribution centres. UK higher education institutions could serve similar roles: retraining workers for emergency roles, hosting public services and anchoring local recovery efforts. Post-92 institutions, with their civic embeddedness and skills-based training, are especially well placed for such mobilisation.

Queen's University Belfast offers a powerful case of intellectual diplomacy. Through the Talk4Peace initiative, developed with mediation experts and rooted in Northern Ireland's peace process, Queen's helps export conflict resolution frameworks to fragile regions.[28] This is more than soft power, it is targeted, experience-based conflict capacity built on scholarly insight and historical legitimacy.

Together, these functions form a distributed but potent architecture; a 'composite capability' that connects elite research with local delivery, global diplomacy with public service continuity. Yet this potential remains largely untapped.

Currently, no formal protocols govern the integration of higher education institutions into national emergency coordination, whether at local or central levels. The sector lacks guidance on research continuity during cyber disruption or infrastructural attack. Unlike other public services, universities are not routinely included in civil contingency planning or simulation exercises.

This is not a failure of will, but of policy design. The UK higher education system possesses a latent national asset for resilience and wartime readiness, but without strategic frameworks its capacity remains fragmented and reactive rather than prepared.

Conclusion: toward a strategy for the wartime university

In an era of growing geopolitical instability, UK universities must be recognised not as peripheral institutions, but as core components of national resilience. They are knowledge producers, skills hubs, civic convenors and global connectors. In this, they provide a 'composite capability' that spans defence, health, education and democratic life. This latent strategic value is considerable. But it remains under-leveraged, under-structured and, given the general financial challenges and contraction of the higher education sector, at risk of erosion.

The evidence is clear: from training military personnel and supporting veterans, to hosting community resilience programmes, supporting global health security, and facilitating diplomatic partnerships, UK higher education institutions already operate across the domains critical to national readiness. Yet this activity is fragmented, often informal, and largely absent from official contingency frameworks. In a future crisis, this diffuse potential may be squandered for lack of coordination.

There is also risk in mobilisation done poorly. Strengths that make universities effective in moments of crisis such as intellectual autonomy, civic trust and international legitimacy can be undermined if they are politicised, coerced or stripped of their critical functions. History shows the damage that can follow when academic freedom is sacrificed to wartime expediency.

The policy challenge is therefore twofold. First, universities must be explicitly and strategically integrated into UK resilience planning. Secondly, this integration must preserve their independence, ensuring they remain sites of open inquiry, civic pluralism, and democratic continuity.

The UK has one of the world's most expansive and capable higher education sectors. But without clear foresight and policy intent, it risks becoming a passive casualty of future crises rather than an active agent of resilience.

A new strategy for the wartime university would do more than strengthen national preparedness. It would ensure that universities continue to serve the society they are built to protect.

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