DISTANCE EDUCATION

The IGNOU–Army Education Project (IAEP): Empowering Soldiers for Higher Education and Resettlement in Alignment with the National Education Policy (NEP) 2020 and Artificial Intelligence (AI)

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Abstract

The IGNOU–Army Education Project (IAEP) represents a groundbreaking collaboration between the Indira Gandhi National Open University (IGNOU) and the Indian Army to empower serving and retired soldiers through higher education. This paper explores the impact of IAEP on soldiers' academic growth, skill development, and post-retirement resettlement. Using qualitative and quantitative insights from policy analysis, secondary literature, and case studies, the study examines how IAEP bridges the educational gap for defense personnel, aligns with the National Education Policy (NEP) 2020, and contributes to national capacity building. Findings indicate that the project enhances employability, leadership, and digital literacy among soldiers, though challenges persist in outreach, recognition, and post-service employment linkage. Recommendations emphasize digital transformation, AI-based learning tools, and stronger industry partnerships to ensure sustainable educational empowerment and reintegration into civilian life.

Keywords: artificial intelligence; higher education; IAEP; IGNOU; Indian Armed Forces; lifelong learning; NEP 2020; resettlement

1 Introduction

In the present era of globalization, growing economy and rapid development, the improvement of quality output and retention rates in higher education are of tremendous importance for the development of any nation. The most significant indication of educational improvement in every country is the student academic performance. It is evident that in today's complex and interconnected world, the academic performance of students not only serves as a yardstick for educational institutions but also plays a pivotal role in shaping the future trajectory of individuals and notions alike.

Higher education plays an extremely important role in promoting human as well as societal wellbeing and developing India. The 21st century requirements, quality higher education must aim to develop good, thoughtful, well rounded, and creative individuals. It must enable an individual to study one or more specialised areas of interest at a deep level, and also develop character, ethical and constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service and 21st century capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages as well

as professional technical and vocational subjects. A quality higher education must enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to society. It prepares students for more meaningful and satisfying lives and work roles and enables economic independence *(NEP 2020)*.

India has the world's third largest armed forces. With an approximate strength of 1.5 million, the Armed Forces are one of the largest employers of human resource in the country. The annual intake is about approximately one lakh soldiers, besides 1.5 million serving personnel, the armed forces have approximately 50 lakh ex-servicemen (ESM), with around one lakh retiring soldiers joining these veterans every year. A bulk of these soldiers retired at a very young age when they are their 30s. The Indian Army, which is the largest of three armed forces, retires the maximum soldiers followed by the Indian Air Force and Indian Navy. Out of one lakh retired, Army retired are approximately 80 percent (2024). There is an important dimension to this fact pointed out by Vombatkere (2015), "Continued neglect of veterans over the years is actually costing the country doubly, as on one hand valuable trained manpower is being lost and on the other, impecunious soldiers are joining the ranks of the unemployed or under - employed, exacerbating the current high level of country wide discontent".

The Indian Armed Forces have long upheld the ethos of discipline, dedication, and service to the nation. However, the transition from active duty to civilian life often presents challenges in education, employability, and reintegration. Recognizing this, the IGNOU–Army Education Project (IAEP) was launched in 1998 to facilitate access to higher education for soldiers, sailors, and airmen.

The project reflects a vision of "Education for Empowerment", enabling soldiers to pursue academic qualifications while in service and to enhance their post-retirement career prospects. In a broader sense, IAEP contributes to national development by transforming defense personnel into skilled, educated citizens ready for civilian participation in the economy.

The IGNOU has taken significant steps enhancing educational opportunities for the brave soldiers serving in the Indian Army through IGNOU-Army Education Project (IAEP). Under this project IGNOU has extended the outreach of its academic programmes to the soldiers and their families on a single window basis.

Recently IGNOU signed Memorandum of Understanding (MoUs) with the three defence forces to offer skill- based bachelor degree programmes to the Agniveers. The collaboration between IGNOU and the Armed Forces has resulted in the introduction of five skill- based courses for the Agniveers:

- BAAS: Bachelor of Arts (Applied Skills)
- BAASTM: Bachelor of Arts (Applied Skills) Tourism Management
- BAASMSME: Bachelor of Arts (Applied Skills) MSME
- BCOMAS: Bachelor of Commerce (Applied Skills)
- BSCAS: Bachelor of Science (Applied Skills)

These programmes present a unique combination of discipline- based and skill courses. The total credits requirement for each program is 120, with IGNOU offering 60 credits through its courses, while the remaining 60 credits come from in-service skill education provided by the armed forces. The skill courses offered by the Indian Armed Forces are approved by the National Council for Vocational Education and Training (NCVET), a regulatory body for skill education. Moreover, these programmes align with the recommendations of the National Education Policy 2020 (NEP 2020), aiming to integrate higher education with skill development.

1.1 Military education

Military education is primarily concerned with preparing students for specialised skills required in future combat. The goals, motivation and applications sought by the students are different in civilian and military education. In traditional civic education, success is measured by the amount of knowledge gained through the lecture program. So the range of educational attainment is generally unrestricted. The purpose of military education is to prepare military personnel for specialised jobs and missions. In military education systems, learning is measured by students' ability to master predetermined doctrines and standards. Military education aims to transform the cadet officers from a junior officer to a military specialist (Thug et.al., 2009).

1.2 Artificial intelligence (AI) and e-learning

Artificial Intelligence (AI) is a program written in a logical programming language that simulates human Intelligence and performs tasks based on previously collected data. As a result artificial intelligence (AI) technologies provide more remarkable ability to see (computer version), hear (speech recognition) and understand (natural language processing) than has ever been possible before. (Rouhiainen, 2018).

Rouhiainen (2018) depicted that AI has a tendency to change the future of education by providing personalised education platforms, individualised AI coaches, Individualised artificial intelligence tutors, and making the learning experience more enjoyable.

E- learning is a modern method of learning that has become an essential component of the Indian educational system and has altered people's perceptions of education as a whole (Ischebeck, 2017), E- learning refers to the use of data and communication technologies to provide online learning or teaching resources.

The use of technology, particularly e-learning technology and Artificial Intelligence (AI) is becoming a more widely recognised strategy for developing students' independent, critical and strategic thinking abilities, among other things. Taking advantage of current information and technology trends has become essential and beneficial for military personnel as well as civilian personnel. Soldiers must receive training in a technology supported environment to be prepared for the challenges they will face once they enter the workforce (Halaweh, 2018). As a result of these digital technologies, communication is facilitated by the ability for students to present their point of views to a variety of audiences and the exposure of students to the perspective of others (Arghode et.al., 2017), Understanding is more important than memorising facts, and it is this understanding Indian armed forces soldiers require the most in combat and war training situations (Reid- Martinez and Grooms, 2021).

2 Objectives of the study

1. To examine the structure and objectives of the IGNOU–Army Education Project (IAEP).
2. To assess its role in empowering soldiers for higher education and resettlement.
3. To identify challenges & barriers faced by participants and institutional stakeholders in AI age.
4. To evaluate its alignment with the National Education Policy (NEP) 2020 & Artificial Intelligence (AI).
5. To suggest strategies for improving outcomes through digital and AI-driven innovations.

3 Literature review

3.1 Historical and operational overview of IAEP

The *Indira Gandhi National Open University–Army Education Project (IAEP)* is a long-standing collaborative initiative between IGNOU and the Indian Army aimed at extending accessible education to army personnel and their families.

According to The Indian Express (2020), The Indira Gandhi National Open University (IGNOU) and Indian Army renewed the agreement for the Army Education Project (IAEP). IGNOU's Army Education Project (IAEP) began when the first MoU was signed on May 24, 1999 as a formal MoUs arrangement to provide single- window distance education services to Indian Army personnel for their families, and the agreement has been renewed periodically for five years since then. The IAEP aims to enable soldiers to complete diplomas, undergraduate and other programs while in service, thereby improving employability after discharge and professional mobility during service. Renewals and collaborative initiatives (Including MoUs with Navy and Air Force, and more recent skill-based programming for Agniveers) show continuing institutional commitment to defence targeted ODL.

The Memorandum of Understanding (MoU) for IAEP was first signed on May 24, 1999 and has been periodically renewed, reflecting its sustained relevance over time. Under the project, Recognised Regional Centres (RRCs) have been established across key Army Headquarters, facilitating outreach and support for distance learners without necessitating their dislocation from units, except for counselling and examination purposes.

3.2 Education and skill development in the armed forces

The Indian Armed Forces have historically emphasized continuous learning through in-service training, technical courses, and leadership development. However, academic degrees recognized by the University Grants Commission (UGC) were limited until collaborations with open universities emerged. Studies (Kumar, 2016; Joshi and Sharma, 2020) underline the significance of lifelong learning for soldiers' post-retirement employability.

Srivastava et al. (2019) found increased enrolment of defence personnel in certificate/diploma/degree programmes and documents gains in formal qualification levels for large numbers of soldiers from IGNOU. It has improved their quality of life in terms of career advancement, upward mobility of social status and enhancement of academic competency of the soldiers of Indian Armed Forces, who have dedicated the most productive years of their lives to nation and it is responsibility of the HEIs to provide them vertical mobility in to mainstream of higher education.

3.3 IGNOU's military outreach initiatives

IGNOU, established in 1985, has pioneered open and distance learning (ODL) in India. Through IAEP, the Army Education Corps (AEC) collaborates with IGNOU's Directorate of Distance Education (DDE) to offer undergraduate, postgraduate, diploma, and certificate programs. The project's model was later replicated in the Navy (IANP) and Air Force (IAFP) projects.

A recent study by Gulab and Mehta (2018) on the General Education Scheme of the soldiers of Air Force also found that there was limited motivation from service to improve the technical skills; no extra financial benefits were provided to the airmen for higher technical education; and there was higher fees for technical courses from civil institutions.

The challenges envisaged by Dorothy (2017) to be encountered by the Distance Teaching Institution (DTI) to facilitate in the Staff Development of a Corporate University is also applicable to the DTI reaching out to the Army personnel- mainly because of specific need in the execution of the task especially in terms of the utilization of the knowledge after access into the programme. Self- paced print/online materials are valuable, but pedagogies designed for civilian adult learners may not fully address the learning styles and time constraints of military cohorts; studies call for contextualized, competency- based modules.

3.4 Higher education for resettlement

Resettlement of ex-servicemen is a critical concern for the Ministry of Defence (MoD). Research by Rajan (2018) and the Directorate General of Resettlement (DGR, 2022) highlights that education is a determinant of successful transition to civilian employment. IAEP provides the academic foundation to complement the technical skills gained during service.

3.5 The National Education Policy (NEP) 2020: vision and core tenets

NEP 2020 aims to increase *higher education access and equity* while incorporating *technology, digital learning, and lifelong learning opportunities*. It encourages HEIs to develop courses in emerging technologies and integrate them into the learning ecosystem.

The *National Education Policy (NEP) 2020* lays a transformative roadmap for India's educational landscape. It emphasises increased access, equity, inclusion, and flexible educational pathways across all levels of learning, from foundational to higher education. The policy strongly endorses *Open and Distance Learning (ODL)* as a mechanism to widen educational access and improve the Gross Enrolment Ratio (GER) in higher education — a central objective of the NEP.

Key features include:

- Flexibility through credit transfer and multiple entry/exit points.
- Inclusivity and equity, particularly for socio-economically disadvantaged groups.
- Recognition of ODL as a mainstream delivery model to broaden access.

3.6 Conceptual linkage between IAEP and NEP 2020

Even though explicit scholarly analyses of IAEP vis-à-vis NEP 2020 are limited, several strands in educational research and policy documents help situate this alignment:

3.6.1 ODL as an enabler of NEP goals

NEP 2020's explicit support for strengthening Open and Distance Learning enables institutions like IGNOU to provide flexible, *anytime-anywhere education*, particularly vital for non-traditional learners such as serving soldiers. ODL's focus on flexibility and accessibility mirrors NEP's priority of expanding educational opportunities beyond conventional classrooms.

3.6.2 Empowering lifelong learners and military personnel

While standard studies of NEP focus on systemic reform, the extension of IGNOU's ODL through IAEP directly supports the NEP's vision of lifelong learning opportunities — particularly critical for army personnel who may be stationed away from regular campuses. This model enables seamless integration of military duties with higher education pursuits, thus empowering soldiers to continue learning throughout service and beyond.

3.6.3 Skill recognition and future transition

Emerging initiatives linked with defence recruits — such as tailored bachelor's degrees recognising military training as academic credits — show how NEP-aligned frameworks (e.g., flexibility, skill integration, modular credits) are being adopted in defence-education partnerships. These developments aid soldiers' resettlement in civilian life by formally valuing their in-service training towards educational qualifications.

3.6.4 NEP 2020's aspirations and IAEP's contribution to empowerment

The NEP's restructuring aims to increase higher education participation and inclusivity. For the Indian Armed Forces, this translates into opportunities such as:

- Non-disruptive education through distance modes, aligning with soldiers' mobile lifestyles.
- Flexible progression, resonating with multiple entry/exit mechanisms advocated under NEP.
- Skill recognition and vocational relevance, particularly evident in programmes for Agniveers that integrate service training into academic credits — a principle foregrounded by NEP's flexibility and emphasis on skills.

Furthermore, research into the role of army educational programmes highlights how such initiatives align with NEP's broader principles of holistic development, equity, and collaboration by embedding values, skills, and diverse learning pathways into the educational experience.

3.7 AI and education

AI integration in education is explored as a vehicle for curriculum personalization, access expansion, multilingual learning, and adaptive delivery. Recent research identifies *adaptive learning, language translation, and predictive analytics* as core areas where AI can improve educational outcomes.

IGNOU's *Project Udaan* uses AI to translate content into regional languages, reducing language barriers in higher education — a key NEP goal and a potential benefit to IAEP learners.

Shahzad et al. (2024): Given the centrality of AI in students' educational and social lives, it is essential to evaluate its impact on their well- being critically. Understanding the broader implications of AI on students' mental and emotional health is crucial not only for students themselves but also for educators and policymakers who are responsible for integrating AI technologies into curricula and student support systems.

Chaudhary et al. (2024) and Kamalov et al. (2023) note that, in the context of higher education, AI driven technologies are becoming indispensable tools for the students, not only aiding their academic pursuits but also shaping the way they spend their leisure time.

According to Ellucian (2024), Artificial Intelligence (AI) can automate enrolment workflow, predict attrition risk, and optimize study centre outreach and scheduling. AI usage in higher education has surged 2.3x over the past year, with 9% of leaders expecting even greater use over the next two years. 80% of respondents are adopting AI to boost efficiency and productivity across their institution, making AI a critical tool for day -to-day operations for student success, enrollment management, and marketing.

In their systematic review of artificial intelligence in higher education (2016–2023), Crompton et al. note that AI- driven adoptive tutoring systems can tailor content and pacing individual learners' progress, which suits soldiers with irregular study time like personalization and adoptive learning. It provides automated feedback and assessment with the help of natural language processing and

automated grading can reduce turnaround time for assignments and free instructor time for high value mentoring.

Brown et al. (2020): According to the Horizon Report 2020 Higher Education Edition Report, most incoming students had the option to gather an AI assistant by 2027. These AI companions assist the students by providing "oversight, nudging, adaptive mentoring, research assistance, feedback on assignments, and friendly encouragement" (Brown et al., 2020, P.36).

Luckin et al. (2016): In the field of distance education AI tools used in education can improve learners' academic success by providing one -to-one tutoring to students who need extra help to advance in the learning process, providing personalized learning content to support students with specific learning difficulties, and making school systems more affordable for low- income families so they can eliminate the achievement gaps among students.

4 Research gap

The researcher identified the following gaps by analyzing the review of related literature which may be bridged through the present study:

1. Review shows that almost all of the IGNOU studies have been conducted for the civil students. so there is a scope to study the IGNOU-Army Education Project (IAEP) for the soldiers with their achievement, challenges and future prospects in the age of Artificial intelligence according NEP 2020.
2. No study was found in the context of the IGNOU-Army Education project (IAEP). So, there is a scope to carry out the study and the review of IGNOU-ARMY Education project (IAEP).
3. Research often focuses on soldiers for higher education, leaving a gap in understanding their traditional education, achievement, challenges and future prospects in the age of Artificial Intelligence.
4. Few studies have directly compared the impact of learning attributes on academic performance across both distance & online systems, making it difficult to identify system-specific differences between civil students and defence soldiers.
5. Research could explore how soldiers perceive the impact of learning attributes on their academic performance in conventional job challenges and online education systems, and how these perceptions influence their learning strategies and behaviors.
6. Recent studies reveal that there is a lack of empirical findings regarding the interaction between technological, behavioral, and contextual factors in influencing academic performance of the soldiers in the age of artificial intelligence by NEP 2020.
7. Research focuses on skill-based education, vocational education, career based technical education and various learning adoption during the age of artificial Intelligence and NEP 2020 for the resettlement of the soldiers of Armed forces.

5 Need and importance of the study

The proposed study, *"The IGNOU–Army Education Project (IAEP) empowering soldiers of the for higher education and resettlement* aligns with the National Education Policy (NEP) 2020 and Artificial Intelligence (AI)". is not merely an academic exercise but an imperative for advancing educational practice and theory. Its necessity and significance are underscored by several critical points:

5.1 Addressing knowledge gaps in cross-modal learning dynamics

While existing research has successfully identified various career attributes that influence academic success and has broadly compared the general outcomes of conventional versus online education in the artificial intelligence (AI) age; there remains a substantial gap in understanding how specific career attributes differentially factorize and impact performance across these two distinct modalities. This study will provide a nuanced, empirically-driven comprehension of which attributes are most salient and influential in each learning environment in view of NEP 2020.

5.2 Informing differentiated pedagogical practices and instructional design

Educators as Indian Army Soldiers currently face the complex challenge of designing various effective learning experiences for increasingly diverse student populations across both conventional and online platforms in the artificial intelligence (AI) age; Generic teaching strategies, while broadly applicable, may not yield optimal results in both modalities. For example, traditional classrooms naturally foster interpersonal skills and facilitate immediate feedback, whereas online environments can significantly benefit from interactive content and micro-learning approaches that deliver information in bite sized, engaging units. A thorough understanding of the differential influence of career attributes is therefore essential for tailoring instruction to maximize student engagement and learning outcomes within each specific context in the artificial intelligence (AI) age and NEP 2020.

5.3 Guiding institutional support, policy development and resource allocation

Higher education institutions are continuously striving to enhance student retention, improve completion rates, and elevate overall academic attainment. They also grapple with significant challenges, particularly in online learning in the artificial intelligence (AI) age; such as technical difficulties, limited access to resources, and student isolation. Developing effective policies and making strategic resource allocation decisions necessitate a clear, evidence-based understanding of what truly drives student success in different learning environments according vision of NEP 2020.

5.4 Empowering student self-regulation and development for lifelong learning

Students frequently lack a comprehensive awareness of their own learning processes and the most effective strategies for academic success. Many struggles with critical skills such as self-motivation, effective time management, and adapting to novel learning styles, particularly in the more autonomous online environments. A fundamental objective of higher education extends beyond mere content delivery; it aims to cultivate capable, self-sufficient, and lifelong learners in the artificial intelligence (AI) period as NEP 2020 recommended.

5.5 Advancing educational theory and research on career attribution for soldiers in the AI period

This study will contribute significantly to the theoretical understanding of learning in higher education for soldiers of Indian Armed forces by providing empirical evidence on how career attributes manifest and interact within different educational modalities. By employing factor analysis, the research can identify latent structures of career attributes, offering a more parsimonious and robust theoretical model that explains academic performance across diverse settings. This will allow for the development of more sophisticated models that capture the multidimensionality and interrelationships of these attributes, moving beyond simpler correlational analyses. The findings will also enrich attribution theory by providing contemporary insights into how students in different learning

environments attribute success and failure, and how these attributes impact their motivation and subsequent academic behaviors.

The findings will serve as a vital resource for educators, enabling them to design pedagogical practices and instructional strategies that are precisely tailored to the unique demands and opportunities of each learning environment. This precision will optimize student engagement and learning outcomes, fostering more efficient and effective educational delivery in NEP 2020 and the artificial intelligence (AI) age.

5.6 Outcomes and impact reported in the literature

Empirical studies and institutional reports indicate several positive outcomes from IGNOU's defence projects:

1. Increased enrolment of defence personnel in certificate/diploma/degree programmes and documented gains in formal qualification levels for large numbers of soldiers.
2. Case studies (Indian and international) emphasize the social and economic value of credentialing for armed forces personnel transitioning to civilian life, with ODL filling an important access gap. However, the published literature also records uneven success: some cohorts face administrative problems in credit recognition, and debates have occurred historically between military authorities and IGNOU about recognition of in-service training toward degrees.

5.7 Documented challenges for soldiers engaging with IAEP/ODL

Multiple recurring barriers appear across official reports, journal articles and news coverage:

1. Operational mobility and postings — frequent transfers, deployments (especially to remote or conflict areas), and irregular duty schedules disrupt study continuity and attendance at regional study centres. This is widely identified in military-education literature as a key constraint on retention and completion.
2. Digital access & connectivity — while IGNOU uses distributed study centres and some online resources, many soldiers (especially those posted to field locations) have limited or intermittent internet access and device constraints, reducing their ability to use online learning tools. This has been reinforced in broader ODL studies of military learners.
3. Recognition of in-service skills and credit articulation — there have been controversies over whether military training and skills should directly count toward academic credits; lack of uniform national frameworks previously limited professional certification. News reports and policy debates document these frictions.
4. Awareness, counselling, and local facilitation — successful participation requires active outreach, local coordinators at regional centres, and guidance services tailored for servicemembers' circumstances; several evaluations point to gaps in counselling and administrative support.
5. Pedagogical fit — self-paced print/online materials are valuable, but pedagogies designed for civilian adult learners may not fully address the learning styles and time constraints of military cohorts; studies call for contextualized, competency-based modules.

5.8 Comparative and theoretical literature on ODL for military learners

International research (e.g., on military distance education in other countries) highlights similar themes: the need for flexible, mobile-friendly content; recognition of prior learning (RPL); and robust

learner support pipelines. Theoretical work on adult learning and vocational transferability underscores that formal credentials plus targeted vocational/skill modules facilitate post-service employment. These comparative perspectives serve as a benchmark for assessing IAEP's potential improvements.

5.9 AI in higher education and ODL

1. A growing body of literature (systematic reviews and empirical studies) documents rapid uptake and diverse applications of AI in higher education and distance learning. Key, well-supported findings include.
2. Personalization & adaptive learning: AI-driven adaptive tutoring systems can tailor content and pacing to individual learners' progress, which suits soldiers with irregular study time.
3. Automated feedback & assessment: Natural language processing and automated grading can reduce turnaround times for assignments and free instructor time for high-value mentoring.
4. Administrative efficiency: AI can automate enrolment workflows, predict attrition risk, and optimize study centre outreach and scheduling.
5. Language translation/localization: Large-scale translation tools and AI-assisted content localizer (e.g., initiatives mentioned around IGNOU and AI-enabled translation tools) can expand accessibility for multilingual cohorts.
6. At the same time, literature cautions on equity (access to AI tools), data privacy, academic integrity (misuse of generative AI), and the digital divide — all relevant to the military context where connectivity and device access vary by posting.

5.10 Opportunities specific to IAEP in the AI era and NEP 2020

1. Mobile-first adaptive modules for just-in-time learning that accommodate short study windows during postings. (AI adaptive systems + micro-learning design.)
2. Recognition via competency mapping & RPL aided by AI — automated mapping of military skill records to course competencies could speed credit articulation.
3. AI-assisted counselling/chatbots for 24/7 administrative help and study planning tailored to posting schedules.
4. Localized language support & content translation (enabling pedagogical materials in regional languages) — India-level initiatives illustrate feasibility according NEP 2020.

5.11 Gaps in the literature and research agenda

The existing literature is informative but shows important gaps that the present study can address:

1. Empirical outcome studies with rigorous measures: Limited longitudinal, large-sample evaluations measuring IAEP's effect on completion, post-service employment, or career mobility. (Existing studies are often descriptive or small case studies.)
2. Technology readiness and access mapping: Few studies comprehensively map soldiers' digital access across postings to guide AI/online rollouts.
3. Field trials of AI interventions for military learners: While general AI-in-education literature is growing, there is little published on AI pilots specifically tailored to armed forces ODL in India. Your research could pilot and evaluate such interventions according NEP 2020.

4. Policy and governance analysis: Systematic assessment of credit recognition frameworks, MoU effectiveness, and institutional coordination (IGNOU ↔ service HQs) is patchy in peer-reviewed outlets according NEP 2020.

6 Research methodology

6.1 Research design

This study employs a mixed-methods research design, combining qualitative and quantitative approaches to capture both policy alignment and emerging AI influences in educational delivery. Mixed methods allow integration of narrative insights, stakeholder perspectives, policy document analysis, and measurable learner experience data, providing a holistic view of IAEP's alignment with NEP 2020 and AI-enabled innovations. This study adopts a mixed-method approach integrating descriptive analysis, document review, and qualitative interviews. The primary focus is on program outcomes, learner satisfaction, and resettlement impact.

6.2 Research paradigm

Interpretivist paradigm emphasizing the lived experiences of soldiers and educators within the IAEP system.

Primary: Interviews with serving and retired Army personnel enrolled under IAEP (sample from Northern and Central Commands).

Secondary: Policy documents, IGNOU reports, DGR resettlement data, and academic articles.

6.3 Tools and techniques

- **Qualitative Component:**
- Policy analysis of NEP 2020 and IGNOU/IAEP official texts.
- Semi-structured interviews with IAEP participants and administrators.
- Focus groups with soldiers and veterans about educational experiences.
- **Quantitative Component:**
- Surveys measuring perceptions of access, usefulness, and AI readiness.
- Analytics on enrolment and completion trends in IAEP programmes over time.

This design is consistent with prior educational technology research that integrates policy interpretation and empirical data to evaluate technology-enabled learning systems.

- Descriptive statistics (frequency, percentage) for quantitative data.
- Thematic analysis for qualitative responses.
- SWOT framework to assess institutional strengths and gaps.

6.4 Population and sampling

6.4.1 Target population

- Serving Indian Armed Forces personnel involved in IAEP.
- Veterans engaged in resettlement programmes and higher education.
- IAEP administrators, academic counsellors, and IGNOU officials.

- Experts in AI integration in education (technology and policy scholars).

6.4.2 Sampling strategy

The sampling plan is given in Table 1.

Table 1. Sampling strategy.

S. no.	Group	Sampling Method	Sample Size
1	IAEP Learners	Stratified purposive sampling	150 respondents
2	IAEP Administrators	Purposive sampling	20 respondents
3	Veterans	Snowball sampling	50 respondents
4	AI & Policy Experts	Expert purposive sampling	10 participants

6.5 Data analysis

6.5.1 Qualitative analysis

- **Thematic Coding:** Interviews and FGDs will be coded using qualitative software (e.g., NVivo) to identify recurrent themes related to NEP 2020 goals, IAEP strengths and gaps, and AI integration readiness.
- **Policy Alignment Matrix:** A matrix coding NEP 2020 objectives against IAEP features and AI potential will be developed to visualize alignment patterns (similar to Table 1 in the research article).

6.5.2 Quantitative analysis

Descriptive statistics:

- Mean, standard deviation, and frequency distribution of survey responses.
- Learner demographic and engagement metrics.

Inferential statistics:

- Correlation analysis between learners' digital literacy and their attitudes towards AI tools.
- Regression models to predict the likelihood of successful resettlement outcomes based on IAEP participation and AI readiness.

6.6 Conceptual and visual models

The logic of the study is shown in Figure 1, and the hypothesized relationship between AI readiness and learner outcomes in Figure 2.

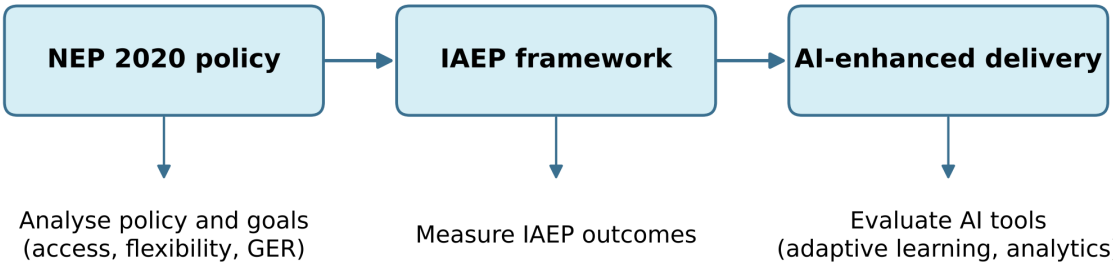


Figure 1. Research flow diagram: how the elements of the study interconnect.

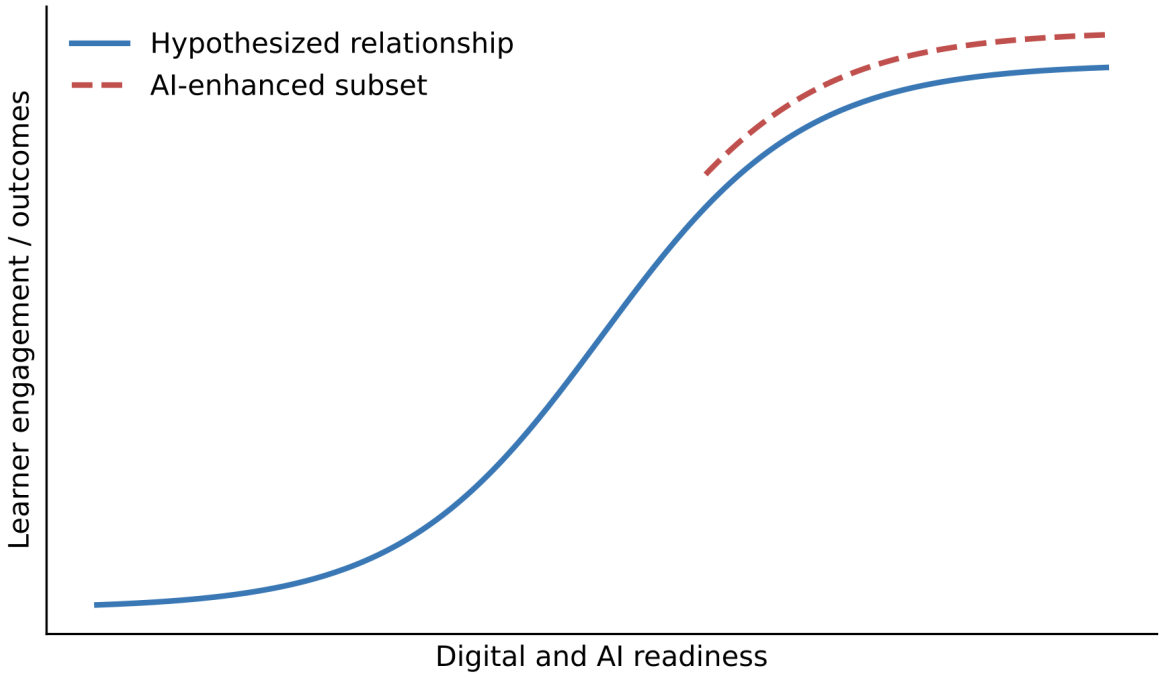


Figure 2. Conceptual graph of the hypothesized relationship between AI readiness and learner outcomes.

6.7 Trustworthiness and ethical considerations

To ensure validity and reliability:

- **Triangulation:** Combined use of interviews, surveys, and document analysis improves credibility.
- **Peer Review:** Codes and themes are cross-checked by expert researchers.
- **Member Checking:** Participants review preliminary findings for accuracy.

Ethics

- Informed consent obtained from all participants.
- Confidentiality and voluntary participation guaranteed.
- No personal identifiers are disclosed in publications.

Limitations

- Survey responses may be impacted by self-report bias.
- AI readiness perceptions are contextual and may vary across units.

Despite these limitations, this methodology offers a comprehensive and rigorous framework for evaluating how IAEP aligns with policy goals and how AI can support its evolution.

The IGNOU–Army Education Project (IAEP): structure and functioning

Administrative framework

The IAEP operates through Regional Centres (RCs) and Army Education Corps (AEC) institutions located at major cantonments (e.g., Pune, Lucknow, Secunderabad). Study centres are managed by AEC officers who serve as coordinators between IGNOU and Army Headquarters.

Programmes offered

- Bachelor's and Master's Degrees (BA, BCom, MA, MCom)
- Diplomas in Management, IT, Human Resource Development
- Certificates in Disaster Management, Cybersecurity, and AI Basics
- Skill-based vocational courses in alignment with Skill India Mission

Learner support and evaluation

Soldiers receive course materials, online access via the IGNOU e-Gyankosh portal, and periodic counseling sessions at study centers. Evaluation combines assignments, term-end exams, and project work.

Conceptual framework: IAEP, NEP 2020 and AI

This study proposes a framework where IAEP, NEP 2020 objectives, and AI technologies align to empower soldiers.

Alignment matrix

The alignment of IAEP with the objectives of NEP 2020 and the potential contribution of AI are shown in Table 2.

Table 2. Alignment matrix of NEP 2020 objectives, IAEP contribution and AI enhancement.

Dimension	NEP 2020 Objective	IAEP Contribution	AI Enhancement
Access & Inclusion	Increase GER & reach marginalized learners	Outreach to Army personnel globally	AI-driven content translation & adaptive platforms
Flexibility & Lifelong Learning	Multiple entry/exits, credit frameworks	Distance learning fitting military schedules	Personalized learning pathways via AI analytics
Career Readiness	Skills for future jobs	Skill integration via choice of courses	AI skill badges, predictive career support
Technology Integration	Digital/AI education ecosystem	Online course delivery	AI tutors, natural language interfaces

Findings and analysis

Enrolment trends

Between 1999 and 2026, IAEP enrolled over 2.8 lakh Army personnel, with a steady increase in diploma and IT courses after 2016, indicating growing awareness of digital literacy's role in employability.

Empowerment through education

Respondents emphasized three key empowerment outcomes:

- **Academic Confidence** : 82% reported improved confidence and communication skills.
- **Professional Readiness** : 68% gained qualifications enabling civilian jobs.
- **Digital and Managerial Skills** : 71% noted enhanced ICT competence.

AI integration in IAEP: opportunities and challenges

Opportunities

- Language Accessibility: AI translation tools can convert IGNOU study materials into regional languages, aiding soldiers from diverse linguistic backgrounds.
- Adaptive Learning: AI can personalize lesson delivery based on learner progress—ideal for military learners with irregular schedules.
- Skill Matching & Resettlement: AI analytics can map soldier's educational outcomes with civilian job markets to inform career paths.

Challenges

- Limited internet connectivity at remote postings.
- Inadequate credit recognition from civil employers.
- Delays in material dispatch and assignment evaluation.
- Lack of structured mentorship for career transition.
- Infrastructure: Defence zones may have limited connectivity and compute resources, hindering AI service delivery.
- Digital Literacy: Soldiers and veterans may need training to use AI platforms effectively.
- Ethical Considerations: Data privacy, algorithmic fairness, and human oversight must be addressed.

Discussion

The IAEP represents a successful example of civil–military educational collaboration. It not only contributes to personal development but also aligns with the national vision of inclusive and lifelong education. The project reinforces NEP 2020's emphasis on flexible, modular learning and open access.

Nevertheless, resettlement success depends on bridging the education–employment gap through industry linkages and AI-driven career counseling. Integration of AI-based personalized learning platforms, micro-credentialing, and recognition of prior learning (RPL) can further modernize the system.

The intersection of IAEP and NEP 2020 encapsulates a policy-practice continuum where *access, flexibility, and quality* converge. When enriched by AI, IAEP's potential impact increases significantly:

- It fosters *multilingual content access*, addressing NEP's inclusivity goals and improving comprehension for soldiers whose primary language may differ.
- AI-powered analytics can support learner progress tracking and recommend adaptive coursework tailored to individual abilities and schedules.
- AI may facilitate *career transition* mapping, assisting veterans in choosing courses aligned with civilian job requirements.

SWOT analysis of IAEP

The strengths, weaknesses, opportunities and threats of IAEP are summarized in Table 3.

Table 3. SWOT analysis of IAEP.

Strengths	Weaknesses
Institutional collaboration between IGNOU and the Army; flexible ODL system; alignment with NEP 2020	Limited digital infrastructure in field areas; delay in recognition of qualifications by employers; insufficient awareness among junior ranks
Opportunities	**Threats**
Digital learning and AI integration; national reskilling missions	Funding constraints; overlap with other educational schemes

Recommendations

- **AI Integration** : Develop adaptive learning platforms for soldiers' personalized progress tracking.
- **Career Transition Cells** : Establish resettlement and placement centers within Army study hubs.
- **Industry Collaboration** : Partner with corporate and government agencies for internship pipelines.
- **Digital Infrastructure** : Expand e-learning connectivity across cantonments.
- **Research and Policy Evaluation** : Regular impact assessments of IAEP outcomes under MoD–IGNOU joint committees.

Conclusion

The IGNOU–Army Education Project stands as a model for democratizing education among uniformed services. It not only empowers soldiers academically but also fosters smoother social and economic reintegration after service. With technological evolution and policy alignment under NEP 2020, IAEP can transition into a digital-era educational ecosystem- one that transforms soldiers into lifelong learners, innovators, and nation-builders. IAEP's foundational mission of enabling higher education access for Indian Army personnel directly aligns with the educational aspirations of NEP 2020. Integrating emerging AI tools can strengthen this alignment by improving accessibility, personalization, reskilling pathways, and post-service employability. Future work should empirically measure outcomes of AI interventions within IAEP and evaluate their effect on resettlement success.

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