



D1.2: Pilots Definition and User Requirements Analysis



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Vision of the project

GenAI4ED is here to empower students, teachers, parents, and guardians with the knowledge and skills to navigate the world of generative AI in education. We want to foster a digital-literate society that can make smart, informed decisions about the role of AI in education.



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Executive Summary

This deliverable (D1.2 Pilots Definition and User Requirements) presents the objectives, methodology, and outcomes of WP1 Tasks 1.3 (co-design of end-user requirements and system specifications) and 1.4 (co-design of pilot studies), providing both a high-level overview of the document and a detailed account of how stakeholder-driven requirements and pilot study designs were developed for the GenAI4ED platform.

The deliverable documents how the project employed a mixed-methods approach combining questionnaires and workshops to design the user requirements and system specifications through extensive stakeholder engagement with students, teachers, and parents. This collaborative co-design process revealed strong cross-stakeholder support for a hybrid platform approach and established five core design principles: structure first with guidance always available, continuity over friction through resume capabilities, training delivered in context via side panels, trust treated as a UX feature with visible responsible-use prompts, and personalisation with restraint to avoid interface overload.

The platform architecture comprises a role-aware personalised dashboard, a ubiquitous conversational assistant for tool recommendations, safe-use guidance, and wayfinding, along with a Training Hub and a Community Space, both also accessible through an embedded side-panel. It further includes a Tool Explorer that applies clear evaluation criteria with trust and privacy cues. A recommendation service provides transparent “why this” suggestions. Non-functional pillars emphasize privacy-by-design with GDPR-compliant and age-appropriate consent, accessibility alignment, and a modular, scalable design suitable for school environments.

Finally, the deliverable outlines the collaboratively implementation strategy encompassing three diverse pilot studies across Italy, Cyprus, and Greece, each designed to specific educational contexts and stakeholder needs: Pilot 1 examines varying AI autonomy levels with 100 students (ages 11-13) across multiple public schools; Pilot 2 focuses on subject-specific integration in STEM, Arts, and English with 180 students (ages 12-18) at PGMS School, Cyprus; and Pilot 3 explores comprehensive cross-curricular integration with 200 secondary students at EA School, Greece, emphasising real-world applicability and psychological wellbeing monitoring. The pilots address both general research questions about optimal AI autonomy levels, teacher-AI collaboration patterns, and psychological adaptation trajectories, as well as pilot-specific questions tailored to each implementation context. Data collection combines pre- and post-performance assessments, ongoing surveys, focus groups, classroom observations by school psychologists, and platform usage analytics. Mixed-methods analysis will provide insights into GenAI effectiveness across different educational settings while maintaining focus on student wellbeing, teacher empowerment, and ethical AI use.



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Acronyms

Acronym	Full Form
AI	Artificial Intelligence
CYI	The Cyprus Institute
EA	Ellinogermaniki Agwgi
EPA	European Parents Association
GDPR	General Data Protection Regulation
GenAI	Generative Artificial Intelligence
GenAI4ED	Generative AI for Education (project name)
ISCED	International Standard Classification of Education
IT	Information Technology
KPI	Key Performance Indicator
PGMS	Private Grammar & Modern Schools
PII	Personally Identifiable Information
STEM	Science, Technology, Engineering, and Mathematics
T1.3	Task 1.3 (Co-design of end-users' requirements and system specifications)
T1.4	Task 1.4 (Co-design of pilot studies)
T2.1	Task 2.1 (Pedagogical Guidelines)
T2.4	Task 2.4 (Evaluation Framework)
T3.2	Task 3.2 (Requirements Engineering)
T3.4	Task 3.4 (Criteria Definition Module)
T4.2	Task 4.2 (UX/UI Development)
T4.4	Task 4.4 (Pilot Planning & Usage Tracking)
T5.1-5.6	Tasks 5.1-5.6 (Pilot Implementation and Evaluation)
UX/UI	User Experience/User Interface
WCAG	Web Content Accessibility Guidelines
WE	Wonderful Education
WP1	Work Package 1

WP2	Work Package 2
WP3	Work Package 3
WP5	Work Package 5

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1 Introduction

1.1 Background and Motivation

The integration of generative artificial intelligence (GenAI) into education offers opportunities to enhance teaching, learning, and student engagement. However, to ensure that technological solutions are meaningful, effective, and ethically grounded, their design and implementation must be driven by real-world needs and contexts. In this regard, the GenAI4ED project adopts a co-design approach, engaging stakeholders such as teachers, students, parents/guardians, psychologists, and AI experts in shaping both the platform requirements and the pilot studies that will test its functionality.

T1.3 focuses on the co-design of end-users' requirements and system specifications. By applying user-centred design principles and engaging a wide range of stakeholders, T1.3 ensures that the GenAI4ED platform is grounded in educational needs. Through questionnaires, workshops, and interactive wireframes, the task has systematically obtained user requirements, which serve as the foundation for defining the functional and technical specifications of the platform.

T1.4 takes a complementary approach by co-designing pilot studies that will later be executed and evaluated within the project. Given the multidisciplinary nature of the work, these pilots are designed for the specific contexts of participating schools, considering pedagogical practices, student demographics, and technological capabilities. This ensures that the pilots are not only feasible but also representative of real educational environments, thereby providing meaningful insights into the role of GenAI in education.

Together, these two tasks represent critical first steps in bridging the gap between conceptual system design and practical validation, ensuring that the GenAI4ED platform is both user-driven and contextually relevant.

1.2 Objectives and Scope of Deliverable

The primary objective of this deliverable is to consolidate and report on the activities, methodologies, and outcomes of T1.3 and T1.4, highlighting their contributions to the overall development of the GenAI4ED platform.

Regarding T1.3 (Co-design of end-users' requirements and system specifications):

1. Document the stakeholder engagement process for co-designing user requirements and system specifications.
2. Present the functional and technical specifications derived from these activities, which serve as the foundation for subsequent development and integration.

Regarding T1.4 (Co-design of pilot studies):

3. Outline the co-design methodology applied to developing pilot study concepts and frameworks through collaborative stakeholder engagement.

Regarding the integration of both tasks:

4. Demonstrate the clear link between user-driven requirements (T1.3) and pilot studies design (T1.4), ensuring continuity between system design and pilot implementation.

1.2.1 Relation to Other Tasks

Tasks 1.3 and 1.4 serve as foundational elements within the GenAI4ED project, establishing critical user-centred and implementation frameworks that inform subsequent technical development, evaluation, and deployment phases:

- **Task 1.1 Systematic Review:** Literature findings provide the foundational knowledge base for understanding existing approaches to user requirements and pilot study designs, while identifying key research gaps.
- **Task 1.2 Taxonomy:** The comprehensive categorisation of GenAI tools provides the foundation for tool selection in evaluation studies, while remaining adaptable to include newly developed tools.
- **Task 2.4 Evaluation Framework:** Pilot study designs from T1.4 ensure robust assessment criteria are developed across all stakeholder groups, while user requirements inform evaluation priorities.
- **Task 3.2 Requirements Engineering:** Functional and non-functional requirements derived from T1.3 are translated into technical system specifications and platform architecture.
- **Task 4.2 UX/UI Development:** User experience insights and interface expectations guide the design of intuitive, educator-friendly platform interfaces.
- **Task 4.4 Pilot Planning & Usage Tracking:** Specifications from both tasks inform the integration of monitoring mechanisms and data collection protocols for real-world deployment.
- **Task 5.1-5.6 Pilot Implementation and Evaluation:** School-specific pilot designs provide the operational blueprint for systematic testing and evaluation in authentic educational environments, ensuring evidence-based policy recommendations.

1.3 Structure of the Document

This deliverable is organised into eleven main sections. Following this introduction, Section 2 establishes the co-design methodology for gathering end-user requirements and translating them into system specifications through questionnaires, workshops, and expert validation. Section 3 presents the integrated synthesis of stakeholder feedback, deriving key design principles and insights that inform platform development. Section 4 translates these user requirements into comprehensive functional and non-functional system specifications. Section 5 outlines the collaborative methodology used to design the pilot studies with stakeholder input. Section 6 presents detailed descriptions of three pilot studies across Italy, Cyprus, and Greece, each targeting different educational contexts and GenAI integration approaches. Section 7 articulates the general and pilot-specific research questions derived from the co-design process. Section 8 details the mixed-methods data collection and analysis framework that will be employed across all

pilots. Section 9 provides conclusions and next steps for pilot implementation. Supporting materials including full pilot study plans, consent templates, and co-design documentation are provided in Section 11 annexes.

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2 Co-design of end-users' requirements and system specifications

2.1 Definitions and Rationale

End-user requirements capture what secondary-school stakeholders (students, educators, parents/guardians) need GenAI4ED platform to do in order to be genuinely useful, safe, and practical in their everyday contexts. They are expressed from the user's point of view, independent of implementation. System specifications then translate those requirements into implementable descriptions of the platform: functional modules and their interactions, non-functional properties (privacy, accessibility, reliability, scalability), and the core data objects and interfaces.

Because GenAI in education is fast-evolving and sensitive, we used two complementary methods. First, questionnaires gathered anonymous input from students, educators, and parents to capture broad preferences and concerns. Second, co-design workshops involved small, moderated sessions where participants interacted with screen mock-ups (wireframes) and discussed practical needs, priorities, and trade-offs in real use. Finally, a short consultation with AI experts verified feasibility and clarified non-functional requirements (privacy, reliability, scalability).

2.2 Protocol and Sequencing of Activities

A concise research and ethics protocol was drafted for Task 1.3, specifying the objectives, instruments, consent/assent templates, languages, anonymisation and storage procedures, role-based adaptive questionnaire routing, and workshop facilitation artefacts (ISO 9241-210:2019).

In line with the protocol, we planned to launch questionnaires first and then focus the workshops based on early findings. In practice, timelines overlapped: questionnaires went live slightly earlier, and initial responses informed workshop prompts and wireframe walk-throughs. This staggered overlap maintained momentum and upheld methodological rigour and data-protection standards while combining breadth (questionnaires) with depth (co-design sessions).

2.3 Methods and Instruments

2.3.1 Questionnaires

An adaptive questionnaire was implemented in Microsoft Forms that, following consent/assent, routed each respondent to a role-specific path for Parents, Educators, or Students. The instrument's purpose was to establish a baseline of GenAI literacy and usage across roles, surface perceived benefits and risks, and identify the platform features that matter in day-to-day school contexts, thereby directly informing both the user requirements and the evaluation criteria to be operationalised in the platform.

The content spanned background and AI literacy, current adoption and contexts of use, perceived benefits and concerns (including accuracy, privacy, over-reliance, and alignment with assignments), support and training needs, and expectations for capabilities such as recommendations, tutorials, tool evaluations, and policies or guidance. Multiple-choice and Likert-type items balance breadth with nuance. Data collection was anonymised and consent compliant (Regulation (EU) 2016/679). Localised versions were provided in English, Greek, Spanish, Italian, German, Portuguese, and Dutch where appropriate. A master workbook consolidates responses across roles with a clear role identifier, and chart exports support rapid visual inspection of the results.

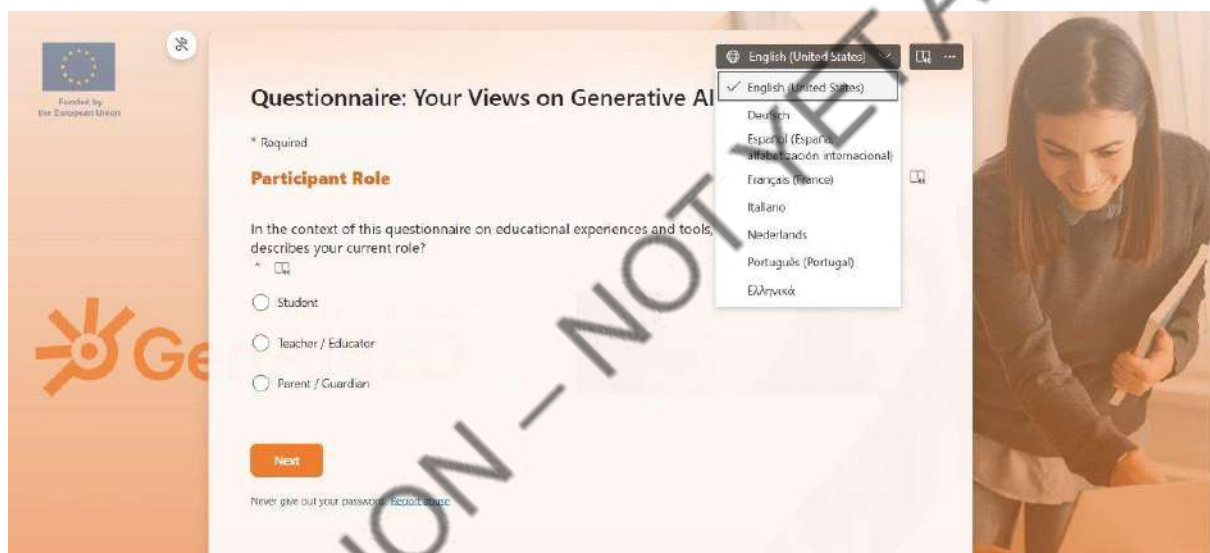


Figure 1: Multilingual questionnaire entry screen (Microsoft Forms)

Dissemination was coordinated with WP6 to maximise cross-role and geographic reach. The WP6 team prepared role-aware posts and visual assets, which were published via the project's official social channels and then amplified through partner and individual accounts (e.g., LinkedIn resharing). Targeted channels complemented this broad push: EPA distributed the parents' questionnaire through its dedicated parent newsletters, PGMS and EA shared the students' and teachers' questionnaires through school networks, and WE circulated the educators' questionnaire across its educator partnerships in Italy and beyond. In parallel, CYI announced the survey through institute-wide internal mailing lists to reach additional parents and educators. All posts linked to the same consent-compliant, multilingual Microsoft Forms instrument (mobile/desktop accessible), helping reduce barriers to participation and support balanced input across parents, educators, and students.

The analysis of questionnaires examined the role-routed responses to surface signals that inform the GenAI4ED platform's requirements. As a first step, responses were

segmented by role, and a set of role-specific visual summaries was generated (one chart per item) directly from the consolidated workbook. These served as the primary lens for inspection and were versioned for traceability. Building on these summaries, we produced descriptive distributions and straightforward cross-role contrasts. Where helpful, simple crosstabs on salient background variables (e.g., prior GenAI use) were reviewed to illuminate requirement-relevant differences. For Likert-type items, results were considered both as full distributions and, where appropriate, in collapsed form (e.g., agree/strongly agree) to provide clear top-line signals. To relate signals across items without over-interpreting, we applied narrative triangulation guided by these summaries (e.g., how prior exposure aligns with concerns or training needs, by role). Findings reflect descriptive and visual evidence grounded in these role-based visualizations and thematic synthesis, with the reported figures for traceability. The questionnaire-derived signals informed the prioritisation and phrasing of the requirements catalogue and the subsequent system specifications, along with the later workshop outputs for coherence.

2.3.2 Workshops

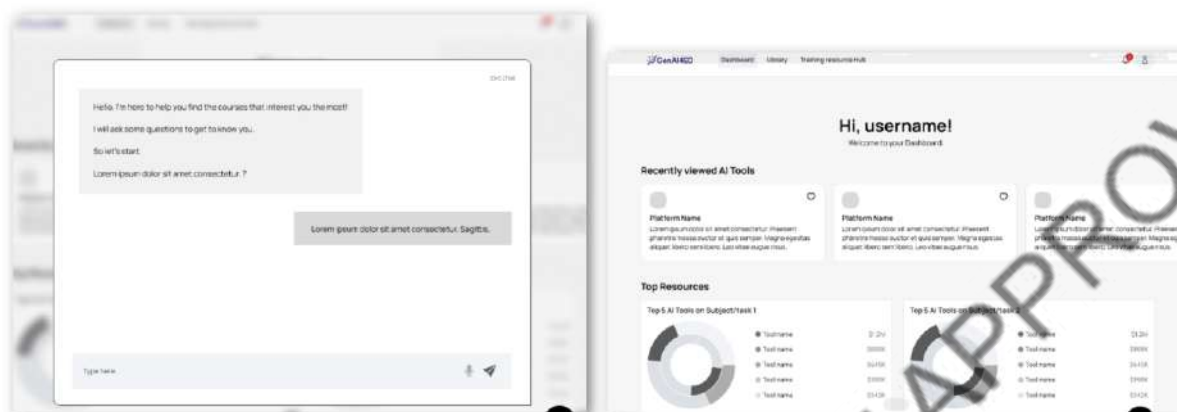
To complement the questionnaire evidence with grounded reactions to concrete design choices, we ran three focused participatory workshops (Educators in Athens, Parents at CYI, and Students online) using a common wireframe (ISO 9241-210:2019; Nielsen, 1994). The wireframe presented the platform as an integrated experience organised around four core pillars, so that participants could respond to realistic flows rather than abstractions:

- **Tool Explorer & Reviews** (*Monitoring & Evaluation Service*)
- **Training Hub** (*Training Service*)
- **Community & Sharing** (*Communication & Collaboration Network*)
- **AI Assistant** (*Real-time Dialogue Interface*)

Within this frame, each session explored the same set of decision points that matter for first-use and everyday work: the **start mode** (personalised dashboard vs. chatbot entry), **continuity and progress** (resuming where you left off and seeing progress), **how the Training Hub is accessed and organised** (full page vs. quick side panel, tutorials, responsible-use guidance, “how it works” primers), **search and guidance** (natural-language assistant vs. structured navigation), and **tool evaluation views** (what appears on a tool card, credibility and privacy cues, links to policies and guidance).

Facilitation followed a consistent script across all three groups to preserve comparability. Participants first walked through a brief, click-through tour of the wireframe. At each decision point, they selected between clearly labelled options (e.g., “Dashboard” or “Chatbot”), indicating their choice with a simple colour-card vote (e.g., blue for Option A, yellow for Option B). Facilitators also invited brief verbal “why” comments to clarify preferences. The preference tallies were recorded after the sessions to a per-workshop spreadsheet.

1. Which quick-start homepage for the platform do you find more helpful?



 **A chatbot (like ChatGPT) that listens to your request**

 **A dashboard with personalized information**

Figure 2: Presentation slide from Workshops material for start-experience options shown to participants: Chatbot vs Personalized Dashboard.

Sessions conducted:

- **Educators Workshop (Athens):** Organised by TRI and presented/moderated by CYI.
- **Parents Workshop (Nicosia):** Organized and hosted on-site by CYI.
- **Students Workshop (Online):** Organized and hosted-online (with a student group from Greece) by CYI.

We then synthesised these outputs alongside the questionnaire summaries. This alignment made it possible to verify where the quantitative signals (e.g., the strong desire for continuity, the need for responsible-use guidance, the value of a Training Hub) were echoed in the situated reactions to the wireframe, and to extract practical design implications.

2.3.3 Expert Validation

A short consultation with in-house AI experts at The Cyprus Institute was held to sanity-check the proposed design. In parallel, brief discussions with other Task T1.3 technical partners were conducted to confirm alignment and implementation feasibility. The CYI discussion led the process, and partner inputs corroborated the prioritisation of privacy-by-design and data minimisation (GDPR), reliability and safety guardrails for model calls, a modular, scalable architecture, observability/telemetry for monitoring, and staged rollouts to enable safe iteration. These points have been incorporated into the specifications.

2.4 Participants and Coverage

Table 1 shows the number of participants that participated in answering the questionnaire and attending the workshops.

Table 1: Sample summary by role (questionnaires and workshops).

	Parents/ Guardians	Educators	Students	Total
Questionnaires	153	97	21	271
Workshops	11	11	2	24

3 Integrated Synthesis: From Questionnaires and Workshops to Design Decisions

This subsection brings together evidence from the questionnaires and workshops to justify the platform's requirements and specifications. We first summarise the cross-cutting insights. We then show how these insights inform concrete design principles and features. Finally, we highlight role-specific emphases that fine-tune defaults without fragmenting the overall experience.

3.1 Questionnaire Results

This subsection reports the analysis of the role-routed questionnaire corpus undertaken to extract requirement-relevant signals for the GenAI4ED platform. The questionnaire was implemented in Microsoft Forms and used adaptive routing so that respondents, after consent/assent, were directed to the section relevant to their role (Parents/Guardians, Educators, or Students). The instrument captured: background and AI literacy, current adoption and contexts of use, perceived benefits and concerns (including accuracy, privacy, and dependency), support and training needs, and desired platform features (e.g., tutorials, responsible-use guidelines, tool evaluations, information on how GenAI works, personalised recommendations, and policies).

We separated responses by role and synthesised the distributions visible in the charts into narrative summaries for each group. Findings below reflect questionnaire-only evidence. UI preferences (e.g., dashboard vs. chatbot) and interaction flows are addressed separately in the workshop subsection.

3.1.1 Parents/Guardians

Many parents reported having tried GenAI tools at least once, typically in personal or work contexts (e.g., drafting short messages, translations, or quick information lookup). Parents demonstrated strong interest in support and guidance that clarifies what GenAI is, how it works in an educational context, and how it can be used safely and responsibly by their children. Requests consistently included: tutorials, responsible-use guidelines, policy information relevant to schools, and plain-language explanations of how GenAI systems operate and what data they use. Many parents explicitly expressed a desire for clear data-handling notes and practical advice for oversight (e.g., how to monitor or set expectations at home).

In terms of concerns, parents most frequently highlighted the risks of over-reliance on technology and potential loss of creativity. These were followed by worries about misuse due to knowledge gaps, possible negative impacts on social skills, and privacy/data protection issues. Notably, while a significant proportion of parents reported having tried GenAI tools themselves, those who had not tended to emphasise uncertainty and lack of knowledge as barriers, reinforcing the need for accessible, role-appropriate training

materials. Overall, the openness to a platform that tailors content and recommendations to their parental role was positive, particularly when framed with transparency and clarity.

3.1.2 Educators

Educators reported non-trivial, varied usage of GenAI in professional practice, spanning lesson planning, creative exercises, resource discovery, and some forms of assessment support. Reported uses ranged from occasional trial to regular incorporation into planning routines, including drafting lesson materials, brainstorming activities, refining instructions, outlining rubrics, and composing communications. While usage patterns varied by subject and context, there was broad acknowledgement that GenAI can offer practical assistance that saves time or stimulates materials for classroom use, provided it is handled responsibly.

The most salient challenges reported by educators were: accuracy/reliability of outputs, access constraints (availability, cost, or policy restrictions), ethical/responsible-use considerations (e.g., plagiarism, bias, academic integrity), and insufficient training or support. A subset also referenced school-level constraints (e.g., limited access or institutional guidance not yet in place) and technical issues.

Regarding desired platform features, educators converged on six elements: (i) tutorials for practical classroom application, (ii) responsible-use guidelines aligned with educational integrity, (iii) tool evaluations with accessible credibility cues (what the tool does, where it fits, known limitations), (iv) personalised recommendations relevant to subject area, age group, and typical teaching tasks, (v) information on how GenAI works at a level suitable for educators, and (vi) policies or policy summaries that increase clarity and confidence in use. Many expressed willingness to adopt a platform that curates and explains what is relevant to their teaching context and helps them use it well.

3.1.3 Students

Students generally perceived GenAI as helpful for studies. The most frequent uses included understanding difficult topics and researching information, followed by support with homework/projects and exam preparation. Many students indicated at least trying chat-based GenAI tools via personal or school-managed access, most commonly for quick clarification, summarising notes, idea generation, and starting points for homework. A subset mentioned practising coding or language vocabulary. This reflects a pragmatic adoption pattern that focuses on comprehension, scaffolding, and study support.

The dominant concerns for students were the risk of dependency (“relying on AI instead of learning”) and exposure to misinformation or inaccurate outputs. Additional concerns included mismatch between AI-generated responses and teachers’ expectations (e.g., style, depth), and privacy. In terms of desired features, students prioritised: tool

evaluations (to know which tools are suitable and trustworthy), personalised recommendations (to find what is relevant quickly), policies relevant to school use (to understand what is acceptable), and concise “how GenAI works” explainers pitched at their level. Overall, students favoured clarity, credibility, and ease of finding appropriate tools.

3.1.4 Students

Across roles, there is a shared interest in structured support (tutorials, guidance), transparent evaluation of tools (what they do, how they handle data, what to watch for), and simple explanations of how GenAI operates. Privacy, accuracy/misinformation, and over-reliance are consistent concerns, though their relative salience varies: for parents, over-reliance and creativity loss are dominant, for educators, accuracy/reliability and responsible use are paramount, while for students, dependency and misinformation lead.

Differences tend to reflect role responsibilities:

- **Parents** emphasise **safety, oversight, and clarity**.
- **Educators** emphasise **classroom fit, integrity, and practical utility**.
- **Students** emphasise **credibility, quick relevance, and practical study help**.

A descriptive cross-reading suggests that prior exposure to GenAI is associated with greater specificity in both concerns and feature expectations (e.g., those with prior use mention particular challenges and how guidance could help), whereas those without prior use emphasise uncertainty and request foundational explanations. Similarly, where respondents indicated interest in training, they tended to also value responsible-use guidance and evaluation clarity, implying a coherent demand for safe, guided enablement rather than unstructured exploration.

3.2 Workshop Results

This subsection summarises insights from three focused co-design workshops (Educators in Athens, Parents at CYI, Students online) conducted against a shared wireframe to elicit situated preferences on key design choices. Each session followed a consistent flow: brief walkthrough, decision points on start mode, continuity/progress, Training Hub access, search/guidance, and tool evaluation views, and captured clear preference selections. Preference tallies were documented after each session in per-workshop spreadsheets and synthesised at a descriptive level. Findings here are workshop-only and are intended to complement the questionnaire evidence, together forming the basis for the requirements and specifications that follow.

3.2.1 Educators Workshop

Educators favoured by very little a dashboard-first start because it provides a structured entry aligned with their day-to-day tasks and roles. They wanted to land on clearly

labelled tiles (e.g., “Find a tool for [subject/task],” “Open training module,” “View class resources,” “Policies & guidance”) and to use the assistant when they were unsure where to go or needed just-in-time answers. In this framing, the assistant complements the dashboard by handling quick wayfinding and brief clarifications, rather than replacing the dashboard altogether.

Continuity and progress were treated as essential. Educators emphasised the importance of being able to resume exactly where they left off, whether that was a specific tool’s detail page, a training step mid-way, or a previously opened assistant exchange. They also asked for progress visibility that is concise and useful (e.g., which training modules are in progress or complete, what has been bookmarked or recently used, what was the last point of each conversation with the chatbot), rather than long or complex reports.

For the Training Hub, educators preferred side-panel access while working, so they can pull up short, targeted help (tutorial snippets, step-by-step guides, “responsible use” tips) without breaking flow. A full Training Hub view remains useful for deeper learning and browsing, but during tasks, the quick drawer is more efficient. Educators also valued searchable training modules in the Training Hub with plain-language prompts (“Show me how to create an outline for X,” “Explain how to check for hallucinations”), and overview-first content with optional deeper examples.

In search and guidance, educators leaned toward conversational search through the AI Chatbot to find tools and “how-to” help quickly, especially when they were not sure what to look for or how to name it. When they did know what they wanted, a lightweight set of filters (subject, task, language, age) in a Tool Explorer was acceptable. The emphasis was on keeping the interface simple and avoiding heavy filter menus.

For tool evaluation views, educators wanted concise cards that show what the tool does, when it is appropriate, any access/cost constraints, and basic data-handling notes. They stressed the importance of credibility cues (e.g., notes about reliability, limitations) and links to policies/guidance so they can judge fit in a school setting. Educators also expressed interest in bookmarking/favourites, saving a shortlist, and comparing tools for a specific teaching task. Overall, the workshop reinforced that clarity, reliability, and classroom fit matter as much as discovery.

3.2.2 Parents Workshop

Parents also preferred a dashboard start, with clear signposting to guidance and training designed for families. They found it helpful when the first screen made it obvious where to learn about GenAI, how to use it safely at home, and where to find policies and privacy information aligned with school contexts. When they were unsure where to begin, the AI assistant was their preferred way to ask questions in plain language and receive a brief, reassuring response, ideally pointing them to relevant GenAI4ED platform pages rather than long explanations.

Parents emphasised reassurance: short, plain-language explanations of how GenAI works, visible privacy notices, and messages that help them understand what is appropriate in school contexts. For the Training Hub, they wanted sections or labels oriented to practical parental concerns, for example, “Getting started safely,” “How to talk about GenAI with your child,” “Checking outputs together,” “Setting expectations and boundaries.” They also expressed a preference for short-format materials (e.g., 2–3 minute reads) with clear next steps.

In search and guidance, parents were comfortable using the AI assistant to ask topical questions (“Is it okay if my child uses X tool for this homework?” “How do we check if the answer is accurate?”). For browsing, they preferred simple paths over complex navigation. In tool evaluation views, they wanted clear trust signals: age suitability, privacy/data-use notes, situations to avoid, and what adult oversight might look like. The tone should be supportive, non-technical, and actionable, prioritising safety and confidence in use.

3.2.3 Students Workshop

Students preferred a dashboard start that gets them to tasks quickly, with minimal friction. They wanted clear tiles for Tool Explorer, Training, and Policies. Short descriptions help them pick the right path without guessing. The AI assistant is their go-to for fast discovery and quick answers, for example, to locate/recommend a tool for a topic, or find a short tutorial, while the dashboard provides structure when they want to browse or return to something they were doing.

Students appreciated concise progress views (e.g., “You have finished 2 of 4 training steps”) in a Training Module and side-panel training while working (e.g., quick tips, examples, or a short reminder on “how to prompt”). Students stressed the value of clear alignment with assignments and teacher expectations, and they responded well to brief “how it works” explainers, as long as they remain short and usable.

For Tool Explorer, they preferred lightweight navigation and recognisable tags (e.g., “good for summarising,” “works for practice questions,” “cites sources”). In tool evaluation views, students wanted to know what a tool is good for, what to be careful about (e.g., potential inaccuracies), how to verify results, and whether it is allowed in a school setting. Some expressed interest in light customisation (e.g., avatar, theme, or layout) as a way to feel more at home in the interface, provided it does not add complexity.

3.2.4 Cross-role contrasts and convergences (Workshops)

Across workshops participants converged on a dashboard-first start with the assistant available everywhere for wayfinding, resume/progress visibility and a Training Hub accessible both as a side panel (in-context) and full view (exploration) were consistently valued. Conversational search was preferred when unsure. A lightweight Tool Explorer

was acceptable for browsing. Tool cards should be concise and trust-building (suitability + basic privacy cues), with links to responsible-use guidance.

- **Educators:** structured dashboard entry, continuity/progress, just-in-time training side panel, clear credibility/policy cues.
- **Parents:** clarity and reassurance via signposted guidance/training, plain-language explainers, transparent privacy notices, and assistant for “where do I start?”.
- **Students:** fast path to tasks, resume actions, compact progress, side-panel training, conversational search, and minimalist tool cards aligned to assignments.

Overall, workshops support a hybrid start (dashboard + assistant), in-context learning support, trust-centred tool presentation, and lightweight navigation, with role-tuned defaults that avoid fragmenting the experience.

3.3 Cross-cutting insights

This section brings together the most consistent signals across roles and explains how they translate into clear design choices for the platform.

Identity & roles. A lightweight sign-in supports role selection (Parent / Educator / Student) and only minimal profile details (e.g., student age band, class/grade, educator subject, preferred language) to enable personalisation and continuity. Workshops indicated users would typically prefer to use a personal email to register. However, the platform remains configurable for school SSO (e.g., Microsoft/Google) where institutions provide managed identities, allowing this choice to be revisited per school context. For minors, age-gating and consent/assent apply, with privacy-by-design and clear, multilingual controls. Access model: Users also expressed that training and informational articles should be publicly accessible without login/registration (read-only), to support discovery, outreach, and equitable access. Interactive features (e.g., saving progress, recommendations, tool evaluations, commenting, or exporting) remain available after sign-in to preserve privacy and ensure appropriate governance.

Hybrid start (dashboard + assistant). By *hybrid start*, we mean that the platform should open on a personalised dashboard (to provide structure and role-relevant entry points) while keeping a conversational assistant immediately available on every screen (to help with wayfinding, quick questions, and confidence when users are unsure). Questionnaires indicated simultaneous appetite for structured navigation and conversational help, and workshops clarified when each is preferred: educators typically start with a plan (dashboard) but ask many micro-questions during work (assistant), parents want reassurance and a clear index yet prefer to ask about unfamiliar concepts, and students want to get started quickly and then ask when stuck. This is not a compromise but a *division of labour*: the dashboard reduces choice overload, while the assistant reduces uncertainty (Schwendimann et al., 2017; Okonkwo & Ade-Ibijola, 2021).

Continuity and lightweight progress. Across roles, participants want to resume where they left off without having to reconstruct context. In practice, this means the platform remembers the last activity (e.g., “reopen the last tool”, “return to the last training step”) and offers simple, non-intrusive progress cues (e.g., “Training 2/5”). The intent is orientation, not grading: a gentle scaffold that reduces friction between sessions and helps users pick up the thread quickly (Schwendimann et al., 2017; Shneiderman et al., 2016).

Training in context, not a separate portal. Stakeholders do not want a detached training website. They want short, role-aware, searchable help that appears alongside the task at hand. The Training Hub therefore has two modes: a side panel for quick, in-context help (micro-guides, “how it works” primers, responsible-use tips) and a full-page view for deeper exploration (tutorials, step-by-step explainers, and curated learning paths) (ISO 9241-210:2019). Parents emphasised responsible use in plain language; educators emphasised practical, classroom-ready tutorials; students asked for brief, example-led explanations aligned to their study tasks.

Trust as part of the user experience. Concerns about accuracy, misuse, and privacy featured prominently for educators and parents, while students emphasised dependency and mismatch with teacher expectations (UNESCO, 2023; Ji et al., 2023). To address this, the platform integrates visible, timely trust cues where they matter most:

- On **tool cards**, show what a tool is best for (“suitability tags”), known limitations, and a compact note on data handling.
- When suggesting a tool show a short reminder to **verify sources** and follow school norms, before **downloading, sharing, or exporting**.
- Next to **sensitive actions**, show a one-line **privacy notice** with a link to the relevant policy or guidance. This treats trust as a usable feature, not a hidden policy page.

Personalisation without complexity. Questionnaires suggested broad interest in personalised recommendations, and workshops helped define boundaries. Recommendations should focus on task, level, and role, be briefly explainable (“why this”), and never hide or restrict manual choices (Nunes & Jannach, 2017; Ekstrand et al., 2022). Students expressed interest in light visual personalisation, while educators and parents prioritised relevance, transparency, and control over cosmetic changes.

Language and accessibility. The platform should support multilingual content, readable defaults, and patterns aligned with accessibility best practices (e.g., the Web Content Accessibility Guidelines – WCAG), to reduce barriers for diverse users (W3C, 2023).

Design principles derived from the analysis.

- **Structure first, guidance always.** Use the dashboard to anchor core actions, and keep the assistant available everywhere to reduce uncertainty.
- **Continuity over friction.** Preserve session context and provide gentle orientation (resume actions and simple progress).
- **Training in context.** Keep role-aware learning one click away, and balance concise overviews with step-by-step explainers.
- **Trust is a UX feature.** Surface concise responsible-use prompt cases, privacy notices, and evaluation cues at the moment of need.
- **Personalise with restraint.** Make recommendations transparent and optional, without limiting direct user choice.
- **Mind language and access.** Support multiple languages and accessibility-aligned UI so the experience remains inclusive.

These cross-cutting insights provide the rationale for a **dashboard-first, assistant-everywhere** experience, a **two-mode Training Hub**, a **two-mode Community Discussions** module, and **embedded trust and privacy cues**, with **focused personalisation** that remains transparent. They synthesise questionnaire signals with workshop reactions and set the stage for the concrete requirements and specifications presented next.



4 From User Requirements to System Specifications

This section translates the consolidated evidence from questionnaires and workshops into a coherent set of requirements and system specifications for the GenAI4ED platform. It begins by briefly explaining how requirements were derived, presents the requirements catalogue, and then details the functional and non-functional specifications. It concludes with the core data objects and interfaces that enable traceability across user journeys, and the technical validation touchpoints that shaped feasibility decisions.

4.1 Requirements Catalogue

Requirements were distilled by triangulating two complementary sources: (i) questionnaires, which provided cross-role patterns in perceived benefits, concerns, and desired capabilities, and (ii) workshops, which surfaced situated preferences when participants interacted with a realistic wireframe (e.g., start mode, continuity, Training Hub access, search and guidance, and tool evaluation cards). Signals were considered across roles (Parents, Educators, Students) and then calibrated for feasibility, alignment with the platform's aims, and consistency with privacy and school contexts. The resulting catalogue is the minimum viable set for a credible, trustworthy, and usable platform.

How to read the table. Each requirement lists the primary roles it serves, the rationale grounded in the evidence, and a relative priority. Priorities reflect the combination of salience in responses, workshop convergence, and feasibility. The catalogue intentionally contains no “Low” items. Lower-value ideas were not retained, leaving a tight, implementable set.

Table 2: Requirements catalogue (excerpt).

ID	Requirement	Role(s)	Rationale	Priority
R-01	Provide a hybrid start: personalised dashboard plus chatbot entry point	All	Balances structure with on-demand guidance	High
R-02	Resume sessions and show progress across tasks and training	All	Continuity and motivation	High
R-03	Training Hub with role-aware structure and quick side access, and searchable via the assistant	All	Immediate, in-context learning support	High
R-04	Responsible-use guidance and school-relevant policies embedded at point of need	Parents, Educators	Trust, safety, clarity	High

R-05	Tool Explorer with evaluation views, reliability cues, and suitability tags	All	Informed choice and accountability	High
R-06	Personalised recommendations by role, competence, and task	All	Relevance without overload	Medium–High
R-07	Lightweight visual customisation options	Students	Ownership and engagement	Medium
R-08	Transparent data-use notices with simple privacy controls	All	GDPR alignment and trust	High
R-09	Simple global search across tools, training, and policies (assistant-first)	All	Reduces navigation friction	High
R-10	In-platform feedback: quick ratings and free-text notes on tools/training	All	Continuous improvement, aligns with T2.4	Medium
R-11	Role-respecting visibility and permissions for progress/artefacts	Parents, Educators	Privacy and appropriateness	High
R-12	Low-bandwidth friendliness and readable defaults	All	Inclusivity across school contexts	Medium
R-13	“Why this recommendation” explanations and easy dismissal	All	Transparency and user control	Medium–High

4.2 Functional Specifications

The functional specifications describe how the platform realises the requirements. They are presented by user-facing layers and modules, with requirement IDs referenced where useful.

Start layer. A personalised Dashboard surfaces role-aware tiles (e.g., *Tasks*, *Training*, *Tool Explorer*, *Policies & Guidance*, *Progress*) and resume actions for continuity (R-01, R-02). A Conversational Assistant is available throughout, supporting wayfinding (“Where do I...?”), training Q&A, safe-prompt scaffolding, and global search across tools, training, and policies (R-09). The assistant complements structured navigation, helping reduce uncertainty without introducing complexity.

Training Hub. The Training Hub offers quick and easy access via a side panel and a full-page view for deeper learning (R-03). Content types include short tutorials, step-by-step explainers, responsible-use micro-guides, and concise “how GenAI works” primers.

Search supports natural language through the assistant with keyword fallback. Progress training completion badges and resume states allow learners to pick up where they left off (R-02).

Tool Explorer and Evaluation. The Explorer is a catalogue with facets (subject, task, language, age band) and trust cues such as accuracy notes, data handling, and access constraints (R-05). Evaluation cards expose structured fields aligned with the WP2 evaluation criteria for students, educators, and AI experts (e.g., utility, usability, reliability/accuracy, privacy/data handling). These criteria are versioned and governed via the Criteria Definition Module (Task 3.4), enabling updates without reworking the UI. Users can provide lightweight feedback (quick rating + optional free text) to inform iterative refinement (R-10).

Recommendations. A personalisation service proposes GenAI tools available via the web and training from platform’s material based on role, competence, recent activity, and optional preferences (R-06). Each recommendation provides a brief “Why this?” explanation and can be dismissed or saved (R-13) (Nunes & Jannach, 2017). Preference signals are used to improve suggestions over time, in line with privacy constraints.

Progress and Continuity. The platform supports resume states for tasks, training, and exploration, with compact progress views per user and per module (R-02). Where pilots request group-level awareness, educator views are aggregated and anonymised to respect privacy (R-11).

Policies & Guidance. Short, embedded prompts and links to school policies appear at the point of need, for example, before exporting content, when sharing artefacts, or when launching tools with notable data-use implications (R-04, R-08).

Requirements → Features (GenAI4ED)

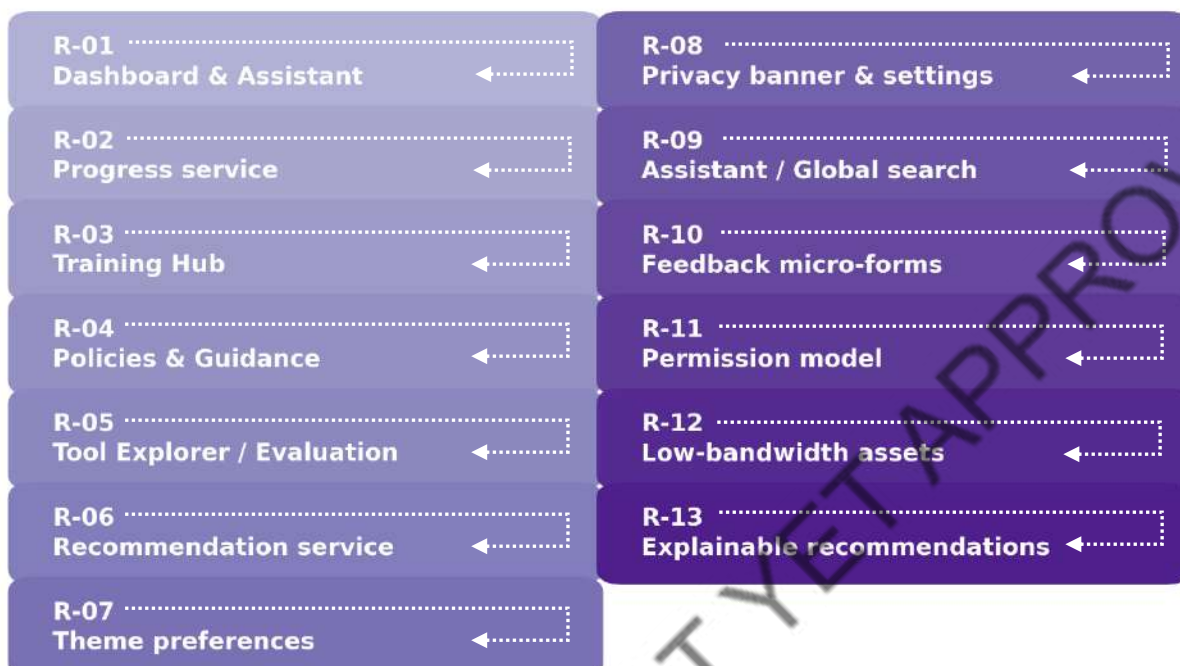


Figure 3: Requirements-to-features mapping

4.3 Non-Functional Specifications

Non-functional specifications define the platform's quality attributes, what it must be like to use and operate, across all features.

Privacy, consent, and age-gating. The platform implements GDPR principles by design, applies data minimisation, and presents explicit notices in context. Age-appropriate consent/assent is enforced. No personally identifiable information (PII) is stored unless explicitly required for pilots and covered by consent (Regulation (EU) 2016/679). PII denotes data that can identify a person (e.g., name, email, student ID), either alone or in combination. Users retain clear visibility and controls over what is stored locally and what may be shared in pilot settings (R-11).

Reliability and safety. Core flows are robust on typical school devices and networks. Where external AI services are going to be used, the platform enforces guardrails (safe-prompt examples), provides provenance/verification cues for critical content, and informs gracefully if external services are unavailable.

Scalability and modularity. The system adopts a modular architecture so that Training, Evaluation, and Recommendations can evolve independently and be deployed in diverse school environments without tight coupling.

Accessibility and internationalisation. The UI follows WCAG-aligned patterns (Web Content Accessibility Guidelines), with readable defaults, appropriate contrast, and keyboard navigability (W3C, 2023). Multi-language content is supported. Low-bandwidth strategies (R-12) such as lightweight media and caching ensure inclusivity where connectivity is constrained.

Observability. The platform collects anonymised usage analytics and telemetry only to the extent needed for iterative improvement, without storing PII unnecessarily.

Interoperability. Evaluation artefacts and pilot KPIs are exportable in structured formats so they can be reused in WP2/WP5 analysis and reporting.

4.4 Interfaces and Core Data Objects

This subsection explains the **core entities** and how they support end-to-end traceability from a user's need to a recommended or evaluated tool, with clear provenance and **role-aware visibility**.

At the user level, a **User** object encapsulates role (Parent/Educator/Student), language, minimal profile/consent flags, and lightweight **progress states** (e.g., last viewed training step, current tool context). The **Training Module** object describes a training item's metadata (title, role relevance, language), its internal steps, and completion state so that users can resume (R-02) and see compact progress.

Tools are represented by a **Tool** object that carries **taxonomy facets** (subject, task, age band, language), **evaluation fields** (utility, ease of use, reliability/accuracy cues), **access details** (cost, sign-in needs), and **policy tags** (privacy/data handling notes). When users or evaluators provide feedback on tools (e.g., quick rating + free text), this generates an **Evaluation Record** with references to the relevant **criteria set** (student/educator/AI expert), scores, and **provenance** (username/when/which context).

The **Recommendation Context** stores non-identifying signals relevant to personalisation (e.g., role, recent activity, optional stated preferences). This enables **explainable recommendations** (R-13) while preserving privacy. Collectively, these interfaces allow the platform to link **user intent** → **training/tool exploration** → **evaluation** → **recommendation**, providing a transparent and auditable pathway aligned with the evaluation logic (WP2) and criteria governance (T3.4).

4.5 Technical Validation Touchpoints

A focused technical validation was conducted with AI experts at The Cyprus Institute (CYI), complemented by exchanges with other Task T1.3 technical partners. This process (i) confirmed the feasibility of a modular back end that separates the evaluation catalogue from recommendation logic, (ii) endorsed a transparent “why this recommendation” layer as part of the user experience, (iii) recommended a safe-

prompting scaffold within the assistant to support training and discovery, and (iv) emphasised privacy-by-design defaults with minimal logging and explicit toggles for pilots. These touchpoints have been incorporated into the functional and non-functional specifications above and will be revisited during WP4 implementation to ensure alignment with evolving criteria and pilot needs.

DRAFT VERSION – NOT YET APPROVED



5 Co-Design Methodology for Pilot Studies

The three pilot studies presented in this deliverable originated from broad concepts defined during the project proposal phase. These initial outlines established the general goals, target audiences, and thematic focuses for each pilot. During the early implementation stages of the project, these concepts underwent extensive collaborative refinement through a structured co-design process coordinated under T1.4.

5.1 Collaborative Refinement Process

The operationalisation of pilot study designs took place through structured biweekly meetings involving key project partners, participating schools, and the organisation of parents' association. These interactive planning and feedback sessions focused on refining specific components of each pilot study:

- **Tool categorisation and recommendation:** Recommending GenAI tools based on school needs and subject-specific educational goals
- **Infrastructure alignment:** Ensuring compatibility with available technological resources in participating schools
- **Student considerations:** Addressing age groups, cognitive profiles, and developmental appropriateness
- **Teacher integration:** Accommodating preferred pedagogical approaches and existing workloads
- **Parent concerns:** Incorporating input on student wellbeing, digital safety, and ethical considerations

5.2 Stakeholder Contributions and Validation

Throughout these sessions, stakeholders (PGMS, EA, WE, EPA) collaboratively validated and refined practical implementation strategies for each pilot. Schools provided feedback on lesson structure, logistical constraints, and integration timelines, while AI experts contributed insights into the appropriateness and calibration of the GenAI tools being tested. The parents' association ensured that pilot designs incorporated attention to students' psychological and emotional wellbeing.

This iterative consultation process shows the core approach of Task 1.4: designing educational solutions with end-users rather than creating solutions without their input (Sunday, A.O et al., 2025). The resulting pilot designs balance between the original project vision with real-world implementation needs and constraints.

5.3 Scope and Boundaries

The work conducted under Task 1.4 represents the design stage of the pilot cycle. The pilots described in this deliverable provide structured blueprints that define objectives, participant groups, school contexts, and thematic areas. T1.4 ensures the pilots are relevant, feasible, and co-created with stakeholders.

T5.1 will subsequently transform these designs into coordinated demonstration plans, execution timelines, and detailed evaluation frameworks. This staged approach ensures continuity between design and implementation while avoiding duplication of efforts across tasks.



6 Pilot Study Descriptions

The GenAI4ED project employs three pilot studies to evaluate the GenAI4ED platform and its tools across diverse educational contexts and implementation approaches. Each pilot addresses different aspects of GenAI integration with the educational sector while providing robust, generalisable insights for educational policy and practice (Sunday, A.O. et al., 2025).

The pilots are deliberately varied in design to ensure comprehensive evidence collection:

- **Pilot 1** examines varying levels of AI autonomy and their impact on young learners (11–13 years) across multiple public schools in *Italy*.
- **Pilot 2** focuses on curriculum-specific integration (STEM, Arts, English) and captures developmental differences across adolescents (12–18 years) in a controlled school environment in *Cyprus*.
- **Pilot 3** explores comprehensive cross-curricular integration in a technology-rich environment, addressing scalability and psychological adaptation in larger, diverse cohorts in *Greece*.

The diversity of pilot studies ensures that findings are not context-specific but provide robust, generalisable insights for broader educational policy and practice. The pilots will systematically evaluate common educational tasks to identify and rank those most effectively complemented by GenAI tools, while also assessing subject-specific integration potential across STEM and other disciplines to determine optimal implementation contexts.

Prior to pilot implementation, ethics approval will be obtained from GenAI4ED Ethics Advisory Board. Informed consent will be secured from both students and their parents/guardians, ensuring full transparency about the research objectives, procedures, and data handling practices throughout the study.

Table 3 summarises the main differences between the three pilots, while the sections that follow describe each pilot study in detail including school characteristics, participants, GenAI tools and implementation procedures.

Table 33: Comparison of Pilot Study Characteristics Across Italy, Cyprus, and Greece

Aspect	Pilot 1: Italy (Multiple Public Schools)	Pilot 2: PGMS School, Cyprus	Pilot 3: EA School, Greece
Subjects Covered	STEM and other subjects	STEM, Arts, English	History, English, Greek, and other subjects
School Type	Multiple public schools	Structured school with prior experience in digital tools	Technologically advanced school with IT lab

Student Age Group	11–13 years	12–18 years (ISCED 2 & 3)	Secondary education students
Number of Students	~100	~180	~200
Number of Teachers	30 (from multiple disciplines)	7 (3 STEM, 2 Arts, 2 English)	15 (from multiple disciplines)
Duration	Approximately 8 weeks	Approximately 8 weeks	Approximately 8 weeks
GenAI Tool Focus	By level of autonomy (with tools defined shortly before the pilot start based on evolving national legislation with reference to AI use by kids aged 11–13)	Subject-specific tools tailored to curriculum	Full platform access ; organic tool selection by teachers and students
Control Group	Yes	Yes	Yes
Psychological Monitoring	No	Yes – School psychologist involved	Yes – School psychologist involved
Design Focus	Compare GenAI autonomy levels & support teachers in creating lessons that consider class configurations and address the needs of students with learning disorders	Subject-specific integration, emotional response monitoring	Broad curriculum integration, focus on real-world applicability and mental wellbeing
Data Collection Methods	Pre/post-tests, surveys, platform analytics	Pre/post-tests, surveys, focus groups, classroom observation, platform analytics	Pre/post-tests, surveys, focus groups, classroom observation, platform analytics
Unique Features	Differentiated lesson plans for learning disorders (e.g., ADHD)	Strong psychologist role in monitoring emotional/cognitive development	Focus on real-world platform usage and cross-curricular flexibility

6.1 Pilot 1: Assessing the GenAI4ED Platform in the Context of Student Learning and Teacher-AI collaboration

6.1.1 School Characteristics and Context

This pilot study will be conducted across various public schools in Italy, engaging educators from three key subject domains: STEM and other subjects such as for instance Arts. The study takes place during regular school hours over a duration approximately 8-weeks to minimise curriculum disruption while allowing sufficient time for participants

to become familiar with GenAI4ED platform and demonstrate meaningful learning outcomes. The selection of diverse subject areas ensures findings will be applicable across different pedagogical contexts and learning objectives.

6.1.2 GenAI Tools and Design Focus

The study employs a systematic approach to evaluating AI tools with varying autonomy levels. Students will be exposed to three distinct categories of GenAI tools representing different degrees of autonomous functionality:

- **Low** autonomy tools (e.g., Canva for Education): Structured, template-based assistance with limited creative freedom.
- **Medium** autonomy tools (e.g., MagicSchool): Adaptive responses and greater content generation flexibility with educational guardrails.
- **High** autonomy tools (e.g., ChatGPT): Sophisticated conversational AI with extensive creative and analytical potential.

It should be highlighted that the tools suggested in the above list are indicative and might change in time depending on the availability of more suitable tools when the time of the piloting comes and depending as well on the evolution of the Italian legislation with respect to the use of AI by the targeted group (minors aged 11-13).

A control group will engage in traditional learning activities without any GenAI tool support, enabling clear comparison across intervention levels.

6.1.3 Target Participants

Students: 100 participants aged 11-13, representing a critical developmental period of transition from concrete to abstract thinking capabilities. This age group is particularly relevant for understanding how GenAI tools can support cognitive development and learning autonomy.

Teachers: 30 educators from participating schools, bringing diverse pedagogical expertise from STEM, and other subject areas. Teacher participants will provide essential insights into practical implementation challenges and opportunities associated with GenAI integration.

6.1.4 Implementation Approach

Students will be assigned to experimental conditions at the class level: control group classes (no GenAI tools), low autonomy GenAI, medium autonomy GenAI, and high autonomy GenAI classes. Students will complete predefined exercises within their respective subject domains according to their class assignment.

Teachers will participate in a comparative analysis, where they develop lesson plans using both traditional and GenAI-assisted approaches (Kim, J. 2024). Particular emphasis

will be placed on creating differentiated lesson plans for students with learning disorders, including ADHD and other specific learning needs.

6.1.5 Measurement Framework

Student Assessment: Learning outcomes measured through pre/post assessments, task completion rates and time efficiency, engagement metrics from platform analytics, and structured evaluation of problem-solving approaches using standardized rubrics.

Teacher Evaluation: Time savings in lesson preparation and content creation, quality improvements in educational materials assessed through peer review protocols, and self-reported confidence levels in integrating GenAI tools into pedagogical practice.

Platform Assessment: User satisfaction scores for interface usability and tool recommendations, technical performance metrics (response time, accuracy, system reliability), and effectiveness ratings for key platform features including the training hub, recommendation engine, and collaborative tools.

6.2 Pilot 2: Assessing the GenAI4ED Platform in the Context of STEM, Arts and English Language Teaching and Learning Methodologies

6.2.1 School Characteristics and Context

This pilot study will be implemented at PGMS School in Nicosia, Cyprus, representing a controlled educational environment that allows curriculum integration across multiple subject areas. The school provides a unique opportunity to evaluate the platform within an established educational framework where students are already familiar with online learning tools, reducing technology adoption learning curves and enabling focused assessment of GenAI-specific educational impacts. Prior to the pilot study commencement, parents will be informed about the GenAI4ED platform, including its educational objectives and how they can support their children's engagement with the tools at home. At the conclusion of the pilot study, parents will receive feedback on the outcomes and their children's learning experiences with the platform.

6.2.2 GenAI Tools and Design Focus

The study will implement GenAI tools tailored to the pedagogical requirements of STEM, Arts, and English Language instruction over a duration of approximately 8-weeks. Unlike Pilot 1's autonomy level focus, this implementation utilises GenAI tools specifically selected and configured to complement existing curriculum in each subject area. Tools will be integrated into regular classroom activities and assignments, allowing naturalistic evaluation within learning contexts. A control group will continue with traditional teaching and learning methods without GenAI tool integration, providing a baseline for comparative analysis.

6.2.3 Target Participants



Students: 180 participants aged 12-18, encompassing both ISCED 2 and ISCED 3 educational levels with careful attention gender balance. This age range captures critical developmental periods from early adolescence through late teenage years, allowing evaluation of GenAI effectiveness across different cognitive and emotional development stages.

Staff: Seven teachers representing diverse subject expertise (three STEM teachers, two Art teachers, and two English language teachers) from PGMS School. Additionally, the school psychologist will participate in monitoring students' emotional and cognitive states throughout the pilot implementation.

6.2.4 Implementation Approach

The experimental design employs a controlled comparison between intervention and control groups at the class level. Intervention groups receive GenAI tool integration specific to their subject area while control groups continue with traditional instructional methods. Comprehensive training will be provided to both students and teachers on platform usage and evaluation guidelines prior to implementation.

6.2.5 Measurement Framework

Student Assessment: Learning performance measured through subject-specific assessments (STEM problem-solving, creative output in Arts, language proficiency in English), task completion efficiency tracked via platform analytics, and emotional engagement evaluated using validated survey instruments and classroom observation protocols.

Teacher Evaluation: Platform usability assessed through standardised user experience questionnaires, integration effectiveness measured by lesson delivery time and content quality improvements, and subject-specific pedagogical benefits evaluated through structured interviews and teaching practice documentation (Kasepalu et al. 2022).

Platform Assessment: Recommendation engine accuracy measured through teacher satisfaction ratings and tool adoption rates across STEM, Arts, and English contexts, training hub effectiveness assessed via completion rates and competency improvements, and technical performance monitored through system analytics and user feedback scores.

Psychological Monitoring: Student wellbeing tracked through validated psychological assessment tools implemented by school psychologists, behavioural observation protocols to identify engagement changes or stress indicators, and structured interviews to capture subjective experiences with GenAI integration across different learning contexts (Karran, A. et al., 2025).

6.3 Pilot 3: Integration of the GenAI4ED platform across Diverse Educational Subjects and Assessing its Impact on Teachers and Students

6.3.1 School Characteristics and Context

This pilot study will be conducted at the EA School, Athens, Greece over a duration of approximately 8-weeks, focusing on the comprehensive integration of the GenAI4ED platform across diverse educational subjects including History, English, Greek, and other curriculum areas without limitation to specific subject domains. The study takes place primarily in the school's IT lab, providing a technology-rich environment that supports comprehensive platform utilisation and facilitates systematic data collection.

6.3.2 GenAI Tools and Design Focus

The study utilises the complete GenAI4ED platform with its integrated set of GenAI tools, allowing teachers and students to select and utilise tools based on specific educational needs across various subjects. Rather than prescribing specific tools for particular subjects, this approach enables organic selection and application of GenAI functionalities, providing insights into user preferences, tool effectiveness across different contexts, and natural usage patterns. The control group will operate without access to the GenAI4ED platform, continuing with traditional teaching and learning methods, thereby enabling direct comparison of educational outcomes and experiences with and without platform integration.

6.3.3 Target Participants

Students: 200 secondary education students representing the largest participant sample among the three pilots. This substantial sample size enables comprehensive evaluation of platform impact across diverse educational contexts with robust statistical power for detecting meaningful differences.

Staff: 15 teachers from various subject areas ensures broad representation of pedagogical approaches and curriculum requirements. The school psychologist will actively participate in monitoring psychological effects on all participants, including potential technostress, isolation, or other mental health impacts.

6.3.4 Implementation Approach

The experimental design employs comparison between intervention and control groups at the class level. Intervention group classes have full access to the GenAI4ED platform for daily use across various educational subjects while control groups continue with conventional approaches. The study emphasises seamless integration into existing educational practices, allowing natural incorporation of GenAI tools into daily academic activities within the IT lab environment.

6.3.5 Measurement Framework

Student Assessment: Learning outcomes measured through pre/post subject-specific assessments, platform usability evaluated via standardized user experience surveys, and psychological well-being monitored through validated instruments (e.g., student engagement scales, technology acceptance questionnaires) administered at regular intervals throughout the pilot period.

Teacher Evaluation: Implementation effectiveness assessed through structured interviews and teaching practice documentation, platform usability measured via standardized technology acceptance surveys, educational value quantified through lesson quality assessments and time-efficiency metrics, and risk/ethical concerns captured through focus groups and incident reporting protocols across all subject areas.

Platform Assessment: Recommendation engine accuracy measured through teacher adoption rates and satisfaction scores for suggested tools across History, English, and Greek instruction, training hub effectiveness evaluated via completion rates and competency pre/post assessments, and objective tool ranking system established using weighted metrics combining usage analytics, user ratings, and educational outcome correlations.

Psychological Monitoring: Systematic detection of technostress using validated stress assessment tools, social isolation monitoring through peer interaction observation protocols and social connectedness surveys, regular wellbeing check-ins conducted by qualified school psychologists, and implementation of intervention protocols when negative indicators exceed predetermined thresholds (Vieriu, A. et al.,2025).



7 Research Questions

The three pilot studies will explore both general research questions (RQ) that apply to all pilots and specific questions that fit each pilot's particular setup and school context. These research questions were developed through the collaborative design process and focus on the key issues and priorities identified by stakeholders across different educational settings until now. Additional research questions may emerge based on AI technological developments and ongoing stakeholder input.

7.1 General Research Questions

RQ1: What level of GenAI autonomy works best for improving learning outcomes and supporting teacher effectiveness in different educational settings?

This research question addresses a critical gap in current GenAI education research by examining the complex interplay between AI autonomy levels and contextual factors. Recent research indicates that a higher level of learning occurs when students use GenAI to construct and augment knowledge (mastery approach), while lower-level learning outcomes result from using GenAI procedurally without knowledge augmentation (Xia, Q., et al. 2024).

However, existing studies have not systematically examined how different autonomy levels perform across varying educational contexts (Kong, X. et al., 2025). By comparing autonomy-focused implementation (Pilot 1), curriculum-integrated approaches (Pilot 2), and cross-curricular integration (Pilot 3), this research will provide unprecedented insights into optimal GenAI integration strategies across different educational scenarios.

RQ2: What patterns emerge when teachers use GenAI tools within different pedagogical frameworks?

This question explores the understudied domain of teacher-AI collaborative dynamics across different implementation approaches. Teachers have identified potential collaboration types including co-teaching, parallel teaching, and differentiated teaching, highlighting how teacher-AI collaboration could support instructional design, teaching delivery, and professional development (Kim, J. 2024).

However, limited evidence exists for effective collaboration between conversational AIs and human teachers (Kasepalu, R. et al., 2022). This research will systematically examine how different implementation approaches influence the development and effectiveness of teacher-AI collaboration patterns.

RQ3: How does student psychological adaptation to GenAI vary by age group, AI autonomy level, and educational setting?

This question addresses the critical but understudied psychological dimensions of GenAI integration in education. Students recognised potential benefits including personalised

learning support and enhanced capabilities, but also expressed concerns about accuracy, privacy, ethical issues, and impacts on personal development (Vieriu, A. M. et al., 2025).

By examining psychological adaptation across three different age ranges (11-13, 12-18, and secondary students) and varying implementation approaches, this research will provide insights into how students psychologically adapt to GenAI integration and identify factors that promote healthy, productive relationships with AI technologies (Zhai, C. et al., 2024).

7.2 Pilot-Specific Research Questions

7.2.1 Pilot Study 1: Public School GenAI Integration Study

Learner-Focused Research Questions: To what extent can AI tools with varying autonomy levels enhance learning outcomes, motivation, and ethical perceptions of students aged 11-13?

This research builds on evidence that students who use GenAI to construct and augment knowledge demonstrate positive impacts on applied knowledge, critical thinking, and learning autonomy (Vieriu, A. M., et al. 2025). However, the relationship between different autonomy levels and these outcomes remains unclear. This study will systematically examine how low, medium, and high autonomy GenAI tools differentially impact learning outcomes among students in early adolescence.

Teacher-Focused Research Questions: How effectively can teachers use GenAI tools for lesson planning tailored to diverse classroom configurations, including support for students with learning disorders?

AI tools can streamline lesson planning and content creation, saving teachers valuable time by generating customized content and research materials. This research will examine how traditional versus GenAI-assisted lesson planning approaches compare in terms of efficiency, pedagogical quality, and effectiveness in addressing diverse student needs, particularly for students with learning disorders.

7.2.2 Pilot Study 2: PGMS School Curriculum Integration Study

Learner-Focused Research Questions: How does GenAI platform integration into STEM, Arts, and English curricula impact educational experience, productivity, and emotional engagement across age groups?

This question addresses the need to understand GenAI integration within established curriculum structures. Assessment should target future workforce competencies, with critical thinking, creativity, problem-solving, and AI literacy skills as explicit learning outcomes. This research will examine how curriculum-integrated GenAI tools impact

educational experiences across the 12-18 age range, providing insights into developmental differences in GenAI effectiveness.

Teacher-Focused Research Questions: To what extent does the GenAI platform support teachers in enhancing lesson delivery and curriculum integration across subjects?

Research shows that teachers' AI literacy improves significantly after professional development, though application of this knowledge is initially limited (Kim, J. 2024). This study will examine how GenAI platform integration supports teachers across different subject areas in enhancing instructional delivery and curriculum alignment.

7.2.3 Pilot Study 3: EA School Cross-Curricular Platform Integration Study

Learner-Focused Research Questions: How does daily GenAI platform use across diverse subjects influence learning experience, usability perceptions, and psychological well-being?

This question addresses the understudied area of comprehensive, cross-curricular GenAI integration. While GenAI tools can significantly improve educational outcomes through personalized feedback, concerns exist about equity and over-reliance on technology. This research will examine how daily, comprehensive GenAI usage across multiple subjects impacts student learning experiences and psychological well-being.

Teacher-Focused Research Questions: How effectively can the GenAI platform be integrated into multiple subjects, and how do teachers evaluate its usability, value, risks, and ethical implications?

Recent research suggests that 73% of educators see balanced benefits and positive potential in AI integration (Karran, A. J., et al. 2025). However, teachers perceive lack of explicit curricula as obstacles to implementing teacher-AI collaboration. This study will examine how teachers navigate GenAI tool integration across multiple subject areas, evaluating their perceptions of usability, educational value, and ethical considerations.

8 Data Collection and Analysis Methods

8.1 Data Collection Methods

8.1.1 Pre-Post Performance Assessments

Performance assessments will be administered at the beginning and end of each pilot study to capture changes in learning outcomes. Pre-assessments will be conducted during the first week of implementation to establish baseline measurements of student knowledge, skills, and competencies in relevant subject areas. These initial assessments will be carefully designed to align with the specific learning objectives and curriculum requirements of each pilot study context.

Post-assessments will be administered during the final week using identical or equivalent instruments to enable direct comparison of learning outcomes. This temporal structure allows evaluation of whether GenAI tools and platform integration leads to improved, maintained, or diminished educational outcomes compared to traditional teaching and learning approaches.

8.1.2 Ongoing Survey Data Collection

Throughout the core implementation period, survey data will be collected from both teachers and students to capture their experiences, perceptions, and evaluations of the GenAI4ED platform and associated tools.

Survey Design: The instruments will incorporate standardised questions consistent across all three pilots, enabling cross-pilot comparison and meta-analysis, as well as pilot-specific questions tailored to each implementation context.

Teacher Surveys: Focus on usability assessments, pedagogical effectiveness evaluations, platform functionality feedback, and professional development impacts.

Student Surveys: Capture learning experience quality, engagement levels, motivation changes, ease of use perceptions, and emotional responses to GenAI tool integration.

Regular administration throughout the implementation period enables tracking of temporal changes in attitudes and experiences as participants become more familiar with the platform.

8.1.3 Psychological Assessment and Focus Group Methods

In Pilots 2 and 3, where school psychologists are integral team members, focus group discussions will be conducted with both students and teachers. These sessions provide opportunities for participants to share detailed experiences, discuss challenges and benefits, and engage in collaborative reflection on their GenAI platform usage.

Facilitation: Focus groups will be facilitated by school psychologists, who bring specialised expertise in group dynamics and psychological assessment.

Structure: Discussions will be organised around pilot-specific themes and research questions, allowing in-depth exploration of topics that emerge from survey data or observation findings.

Purpose: Focus groups provide rich qualitative data that complements quantitative survey results and enables deeper understanding of the mechanisms underlying any observed changes in learning outcomes or user experiences.

8.1.4 Classroom Observation Monitoring

School psychologists in Pilots 2 and 3 will conduct systematic classroom observations to monitor student interactions with GenAI tools and ensure appropriate educational use. Using structured observation protocols, they will focus on student engagement, peer collaboration, emotional wellbeing, and social dynamics during GenAI-assisted learning activities. Their specialized training enables identification of any concerns or issues that may arise, ensuring timely interventions to support student wellbeing throughout the pilot implementation.

8.1.5 Platform Usage Analytics

Usage analytics will be collected from the GenAI4ED platform throughout all pilot implementations to provide objective, behavioural data on user engagement and utilisation patterns.

Analytics Components:

- Time spent within different platform components
- Specific GenAI tools accessed and utilised
- Frequency and duration of platform sessions
- Navigation pathways through platform features
- Instances where users follow platform recommendations to access external GenAI tool websites

Usage analytics will provide objective validation of self-reported survey data and enable identification of usage patterns that may not be apparent to users themselves. This data will be particularly valuable for understanding feature utilisation, identifying usability issues, and documenting relationships between usage intensity and learning outcomes (Bland, T. 2025).

8.2 Analysis approach

8.2.1 Quantitative Analysis Methods



Pre-Post Comparisons: Statistical analysis will focus on pre-post assessment comparisons using appropriate techniques (t-tests, ANOVA, effect size calculations) to determine the significance and magnitude of learning outcome changes across different conditions and pilot studies.

Survey Data Analysis: Descriptive and inferential statistics will be employed to identify patterns, relationships, and differences across groups and pilot studies. This includes correlation analysis, regression modelling, and comparative analysis between intervention and control groups.

Usage Analytics: Data mining and pattern recognition techniques will identify usage clusters, engagement patterns, and relationships between platform use and educational outcomes. Time-series analysis will examine how usage patterns evolve throughout the implementation period.

8.2.2 Qualitative Analysis Methods

Thematic Analysis: Focus group transcripts and observation notes will undergo systematic thematic analysis to identify recurring themes, patterns, and insights that emerge from participant experiences. This will involve coding, theme development, and pattern identification across different stakeholder groups.

Content Analysis: Open-ended survey responses will be analysed using content analysis techniques to identify common themes and categorize participant feedback.

Case Study Development: Individual pilot sites may be analysed as case studies to understand context-specific factors that influence implementation success or challenges.

8.2.3 Mixed-Methods Integration

Triangulation: Quantitative and qualitative findings will be systematically triangulated to provide comprehensive understanding of platform effectiveness, user experiences, and implementation factors.

Sequential Analysis: Initial quantitative results will inform deeper qualitative exploration, while qualitative insights will help interpret and contextualise quantitative findings.

Meta-Analysis: Cross-pilot synthesis will identify patterns and relationships that emerge across different implementation contexts, age groups, and pedagogical approaches.

8.2.4 Ethical and Wellbeing Considerations



All data collection incorporates ethical, legal, and wellbeing safeguards from the design stage. Psychological monitoring in Pilots 2 and 3 ensures emotional and cognitive adaptation tracking, while all pilots include mechanisms for parental involvement to address privacy and digital safety concerns (Zhai, C. et al., 2024). These considerations ensure alignment with broader ethical frameworks and maintain student welfare as central to GenAI4ED integration.

DRAFT VERSION – NOT YET APPROVED



9 Conclusion

The co-design methodology employed in T1.3 and T1.4 successfully established a comprehensive foundation for investigating GenAI integration in secondary education through systematic stakeholder engagement and collaborative pilot development. The tasks focus on both co-designing the platform along with evaluating the platform and its tools, capturing the full study cycle.

Focusing on user requirements, the convergence of evidence from questionnaires and workshops across parents, educators, and students demonstrates remarkable consistency in requirements for structured yet flexible platform design, emphasising the critical importance of trust, transparency, and contextual support.

The resulting system specifications balance technological sophistication with practical educational needs, incorporating privacy-by-design principles and accessibility requirements while maintaining focus on pedagogical effectiveness. The hybrid approach combining dashboard structure with conversational assistance directly addresses the diverse navigation preferences and support needs identified across all stakeholder groups.

In addition, the three pilot studies represent a strategically designed evaluation framework that captures GenAI impact across diverse educational contexts, age groups, and implementation approaches. By varying autonomy levels, subject focus, and integration breadth, the pilots will generate robust, generalisable evidence for educational policy and practice while maintaining attention to psychological wellbeing and ethical considerations.

In summary, this deliverable establishes clear pathways from user-driven requirements to technical specifications to real-world validation, ensuring that subsequent development and evaluation phases remain grounded in authentic educational needs and contexts. The collaborative methodology demonstrated here provides a replicable model for educational technology development that prioritizes stakeholder voice while maintaining scientific precision in evaluation design.

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11 Annexes

11.1 Questionnaires and Workshop responses

11.1.1 Questionnaires' charts

In the context of this questionnaire on educational experiences and tools, which of the following best describes your current role?



Figure 4: Questionnaires sample composition by role

11.1.1.1 Parents Questionnaire results

Gender



Figure 5: Parents - Gender distribution of participants

Age Group



Figure 6: Parents - Age group distribution of participants

Academic level

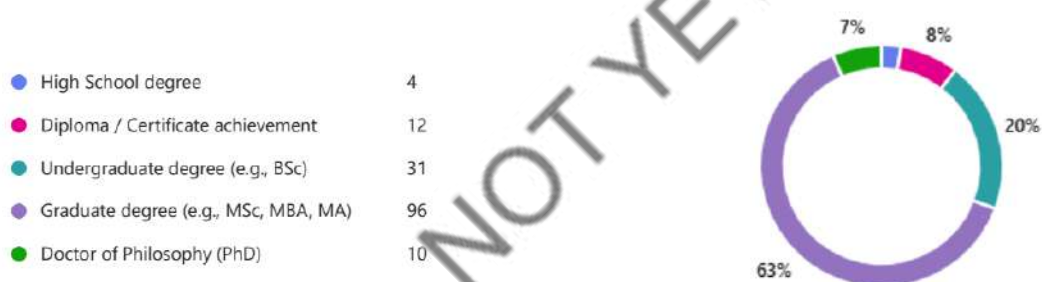


Figure 7: Parents - Academic level of participants

How many children do you have in secondary school (11 – 18 years old)

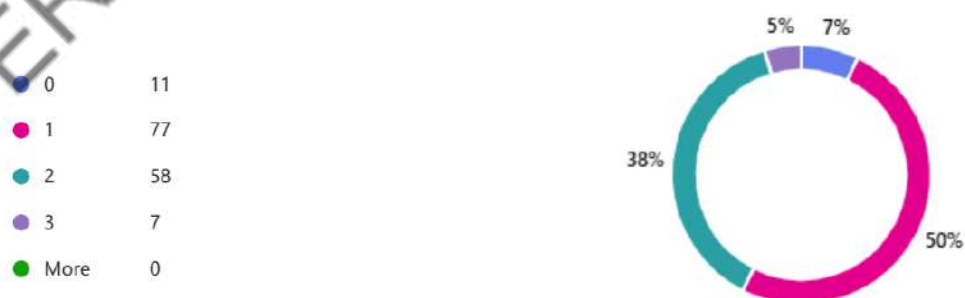


Figure 8: Parents - Number of children in secondary school (11–18 years old) among participants

What matters more to you on your children's education



Figure 9: Parents - Priorities in their children's education

How knowledgeable are you about Generative AI (GenAI) tools (e.g ChatGPT, DALLÉ, Copilot, etc.)?

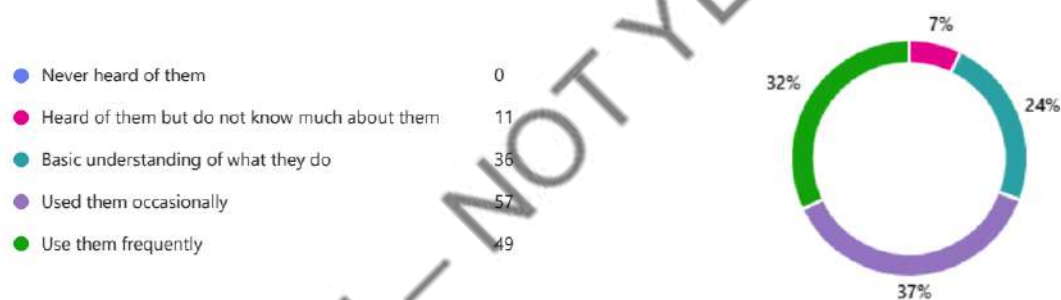


Figure 10: Parents - Participants' knowledge and use of Generative AI tools

Have you used any GenAI tools yourself?



Figure 11: Parents - Participants' personal use of Generative AI tools

Which GenAI tools have you used, if any? (Select all that apply)

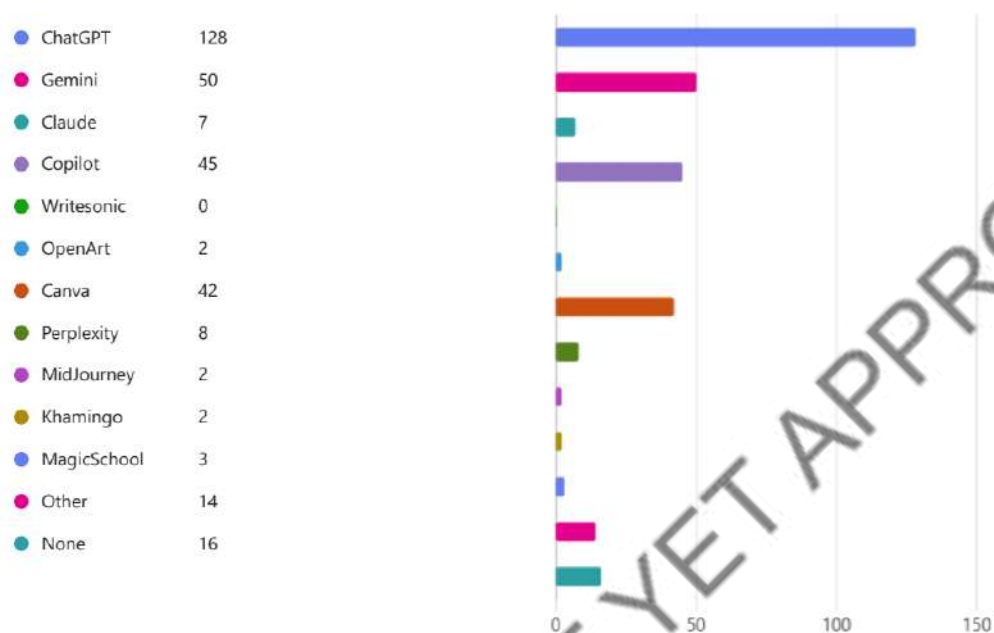


Figure 12: Parents - Generative AI tools used by participants

Are you aware of your children using any GenAI tools?

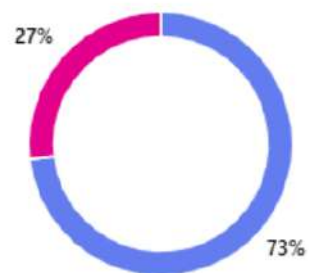
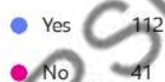


Figure 13: Parents - Awareness of children using Generative AI tools

Do you currently use GenAI tools along with your children to help them in school?



Figure 14: Parents - Use of Generative AI tools with their children for school support

How do your children use GenAI tools for school or learning? (Check all that apply)

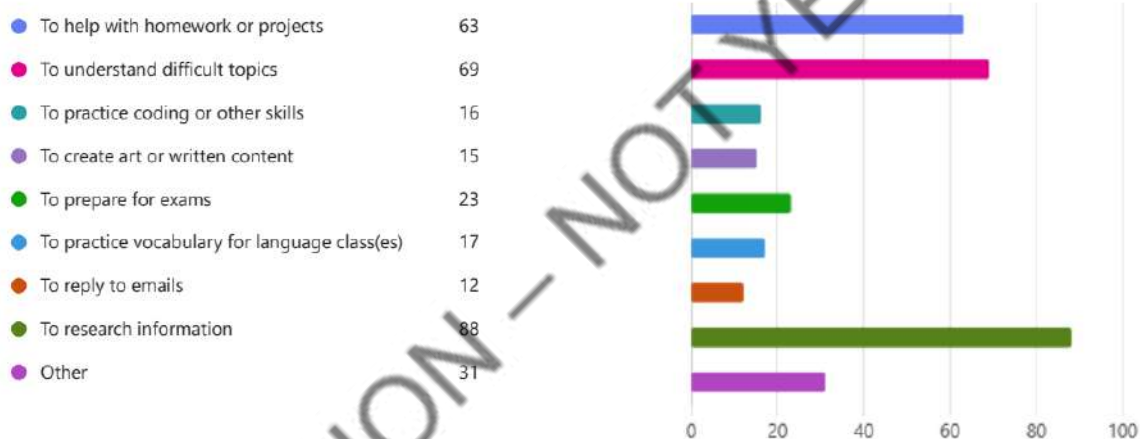


Figure 15: Parents - Their children's use of Generative AI tools for school or learning

How do you feel about your children using GenAI tools for learning?



Figure 16: Parents - Attitudes toward children using Generative AI tools for learning

What benefits do you see in using GenAI in education? (Select all that apply)

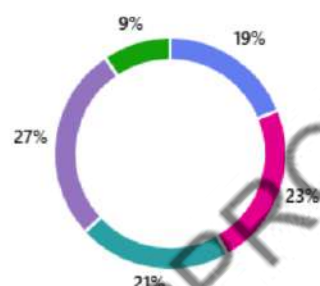
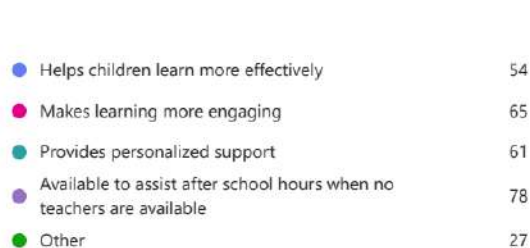


Figure 17: Parents - Perceived benefits of using Generative AI in education

What concerns do you have about using GenAI in education? (Select all that apply)

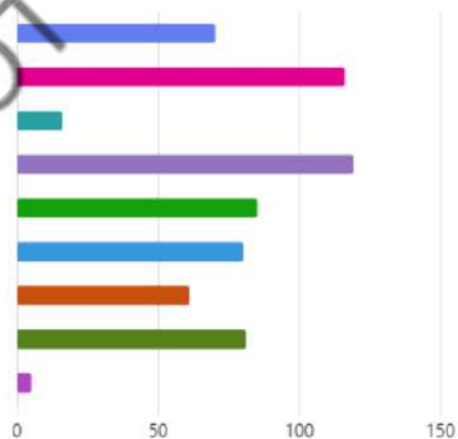
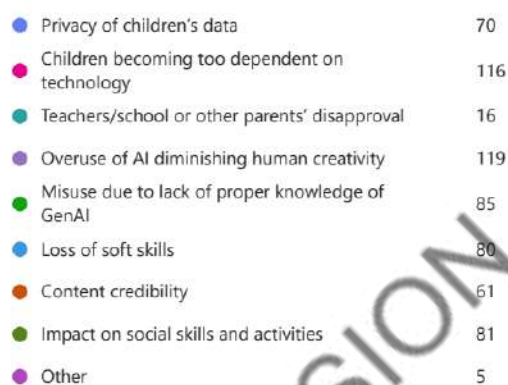


Figure 18: Parents - Concerns about using Generative AI in education

What is your opinion on the following statement?
 "The benefits of GenAI outweigh its risks in education."



Figure 19: Parents - Opinions on whether the benefits of Generative AI outweigh its risks in education

What kind of information or training would help you feel more comfortable with your children using GenAI?

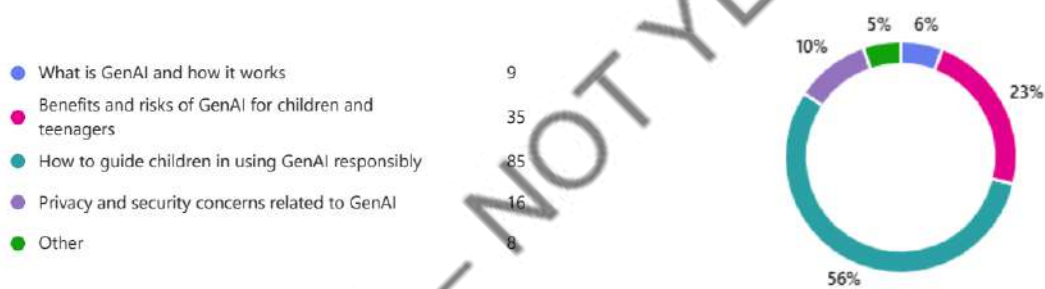


Figure 20: Parents - Information and training needs for supporting children's use of Generative AI

What guidelines or policies do you think should be in place for the use of GenAI in the classroom? (Select all that apply)

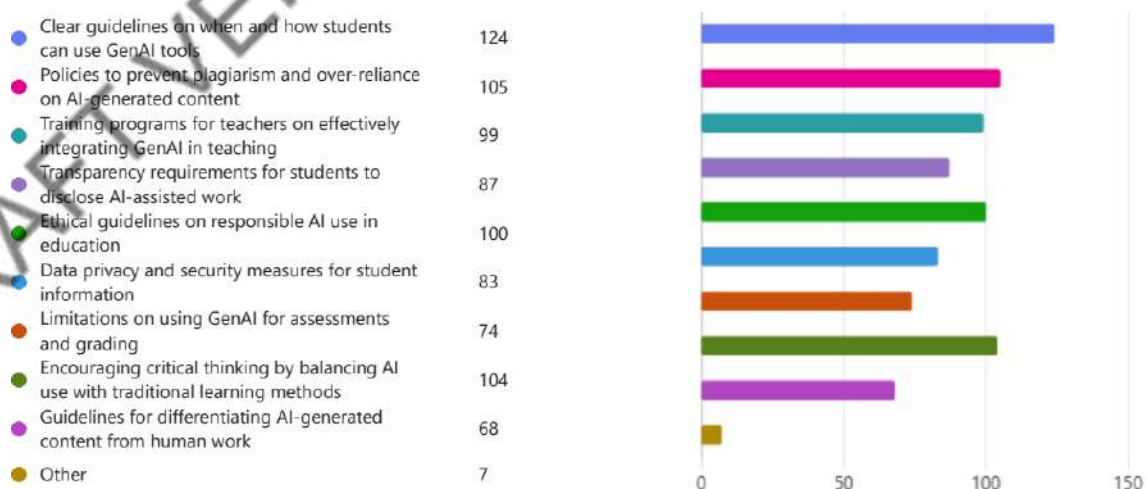


Figure 21: Parents - Suggested guidelines and policies for the use of Generative AI in the classroom

How likely are you to use a platform with personalized recommendations for GenAI educational tools?



Figure 22: Parents - Likelihood of parents using a platform with personalized recommendations for GenAI educational tools

Which features would you like this platform to include? (select all that apply)

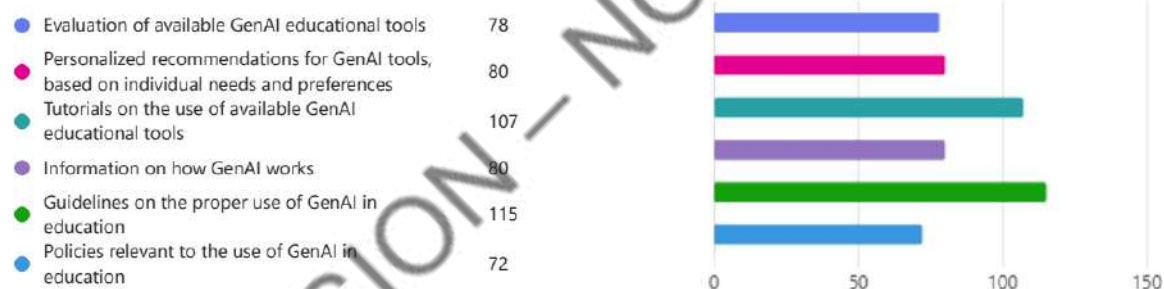


Figure 23: Parents - Preferred features for a GenAI educational platform

11.1.1.2 Students Questionnaire results

Gender

Female	9
Male	11
Prefer not to answer	1

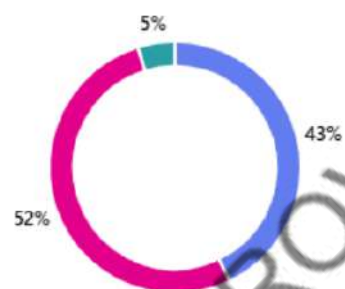


Figure 24: Students - Gender distribution of participants

Age Group

11-12 years	1
13-14 years	4
15-16 years	13
17-18 years	3

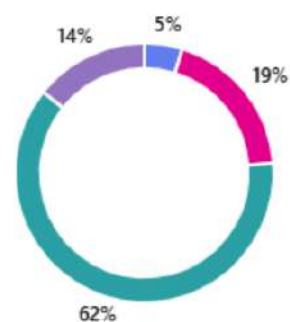


Figure 25: Students - Age group distribution of participants

Main subjects of interest

Sciences – STEM	12
Languages / Literature	1
Humanities	3
Arts	1
Other	4

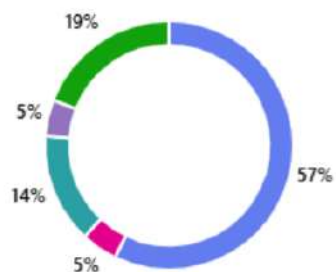


Figure 26: Students - Main subjects of interest among participants

How knowledgeable are you about Generative AI (GenAI) tools (e.g ChatGPT, DALLE, Copilot,etc.)?

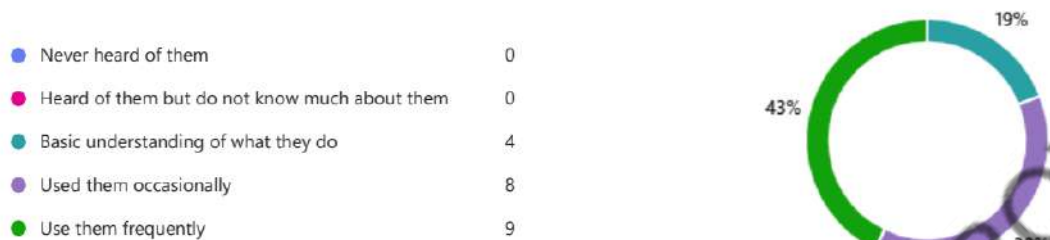


Figure 27: Students - Knowledge and use of Generative AI tools

Have you used any GenAI tools yourself?

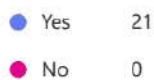


Figure 28: Students - Personal use of Generative AI tools

Which GenAI tools have you used, if any? (Check all that apply)

● ChatGPT	20
● Gemini	7
● Claude	2
● Copilot	8
● Writesonic	0
● OpenArt	0
● Canva	8
● Perplexity	2
● MidJourney	1
● Khamingo	0
● MagicSchool	0
● Other	7
● None	0

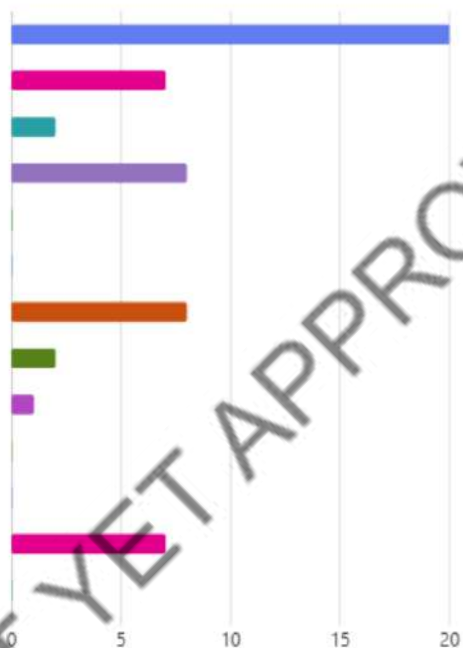


Figure 29: Students: Generative AI tools used by participants

Do you currently use GenAI tools for educational purposes?

● Yes	13
● No	8

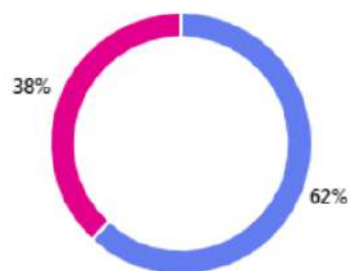


Figure 30: Students - Current use of Generative AI tools for educational purposes

How frequently do you use GenAI tools for learning purposes?

Never	0
Rarely (fewer than 5 times in total)	5
Occasionally (5-10 times)	4
Regularly (at least once a month)	3
Frequently (weekly or more)	9

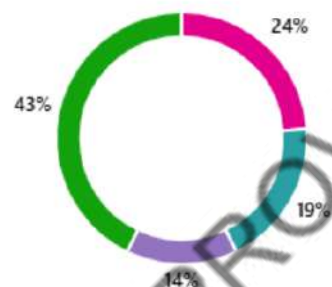


Figure 31: Students - Frequency of use of Generative AI tools for learning purposes

How do you use GenAI tools for school or learning? (Check all that apply)

To help with homework or projects	12
To understand difficult topics	16
To practice coding or other skills	4
To create art or written content	3
To prepare for exams	9
To practice vocabulary for language class(es)	5
To reply to emails	2
To research information	16
Other	3

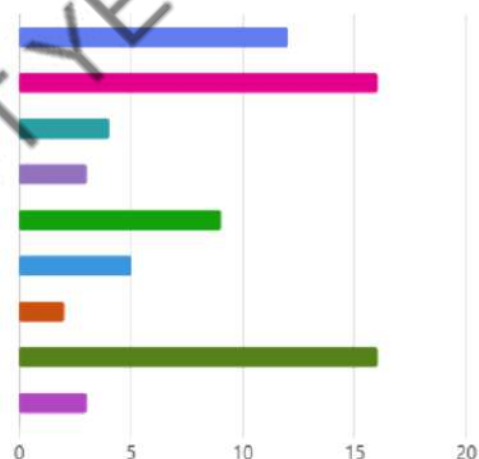


Figure 32: Students - Use of Generative AI tools for school or learning

Have you taken part in any lessons or activities about using GenAI tools?

Yes	6
No	15

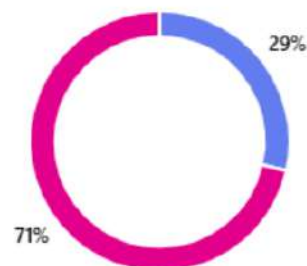


Figure 33: Students - Participation in lessons or activities about Generative AI tools

Where did you first learn about GenAI tools?



Figure 34: Students - Where they first learned about Generative AI tools

How helpful do you find GenAI tools for your studies?



Figure 35: Students - Perceived helpfulness of Generative AI tools for their studies

What challenges have you faced when using/considering using GenAI tools? (Check all that apply)

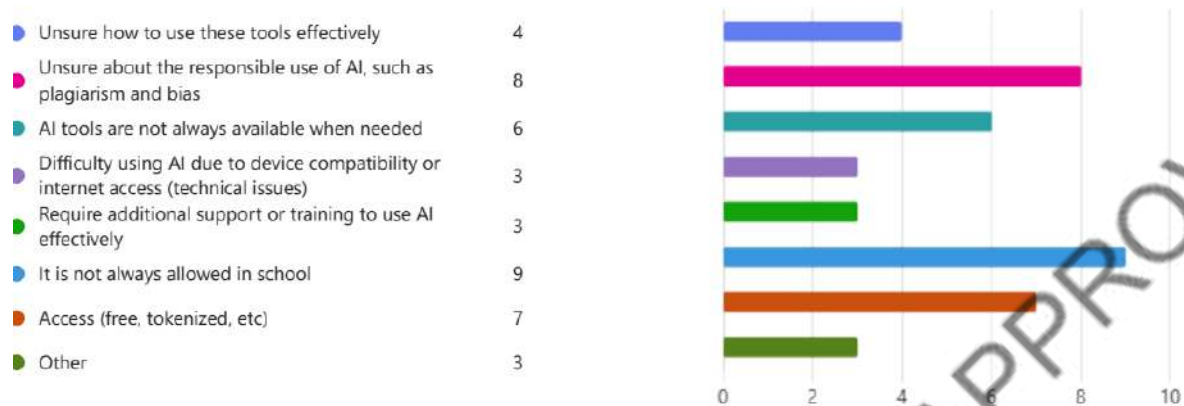


Figure 36: Students - Challenges they face when using or considering using Generative AI tools

What concerns do you have about using GenAI? (Check all that apply)



Figure 37: Students - Concerns about using Generative AI tools

How do you feel about teachers using GenAI tools to assist with teaching?



Figure 38: Students - Attitudes toward teachers using Generative AI tools in teaching

What is your opinion on the following statement?
 "The benefits of GenAI are greater than your worries."



Figure 39: Students - Opinions on whether the benefits of Generative AI outweigh their worries

. What features or tools would you like to see in GenAI for education? (Select all that apply)



Figure 40: Students - Features and tools they would like to see in Generative AI for education

How likely are you to use a platform with personalized recommendations for GenAI educational tools?



Figure 41: Students - Likelihood of using a platform with personalized recommendations for GenAI educational tools

Which features would you like this platform to include? (Check all that apply)



Figure 42: Students - Preferred features they would like included in a GenAI educational platform

11.1.1.3 Educators Questionnaire results

Gender



Figure 43: Educators - Gender distribution of participants

Academic level

Undergraduate degree (e.g., BSc)	12
Graduate degree (e.g., MSc, MBA)	68
Doctor of Philosophy (PhD)	16

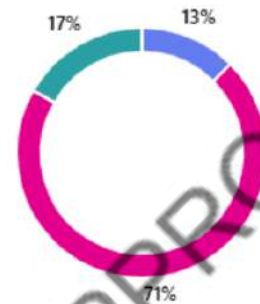


Figure 44: Educators - Academic level of participants

Primary subject area or specialization

Sciences - STEM	50
Languages / Literature	25
Humanities	6
Arts	7
Other	8

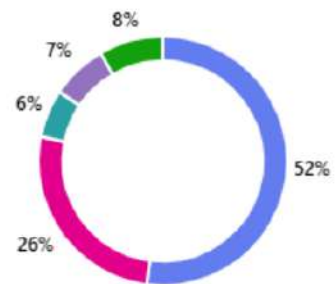


Figure 45: Educators - Primary subject areas or specializations of participants

How many years have you been teaching?

Less than 1 year	0
1–5 years	13
6–10 years	14
11–20 years	29
More than 20 years	40



Figure 46: Educators - Teaching experience of participants (in years)

How knowledgeable are you about Generative AI (GenAI) tools (e.g ChatGPT, DALLE, Copilot,etc.)?

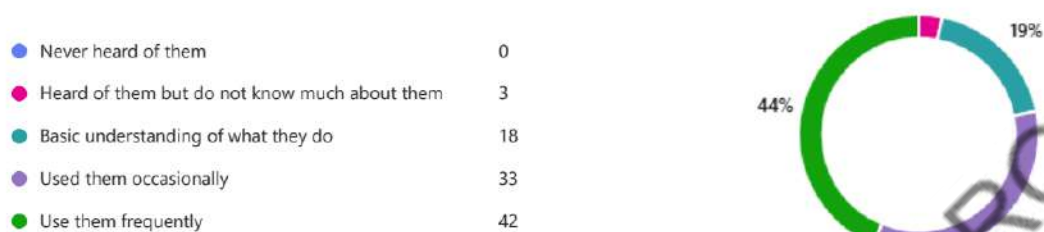


Figure 47: Educators - Knowledge levels about Generative AI tools

Have you used any GenAI tools yourself?



Figure 48: Educators - Use of Generative AI tools

Which GenAI tools have you used, if any? (Check all that apply)

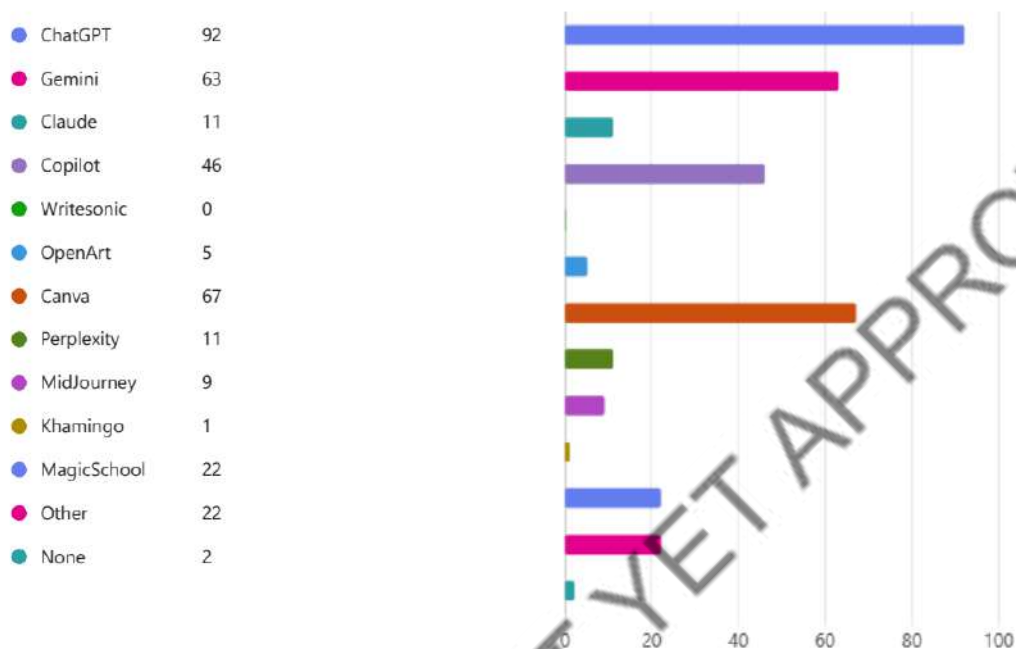


Figure 49: Educators - Types of Generative AI tools they have used

Do you currently use GenAI tools for educational purposes?

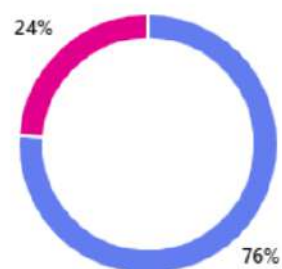
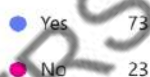


Figure 50: Educators - Current use of Generative AI tools for educational purposes

How frequently do you use GenAI tools in your teaching?



Figure 51: Educators - Frequency of use of Generative AI tools in their teaching

How do you use GenAI in the classroom? (Check all that apply)

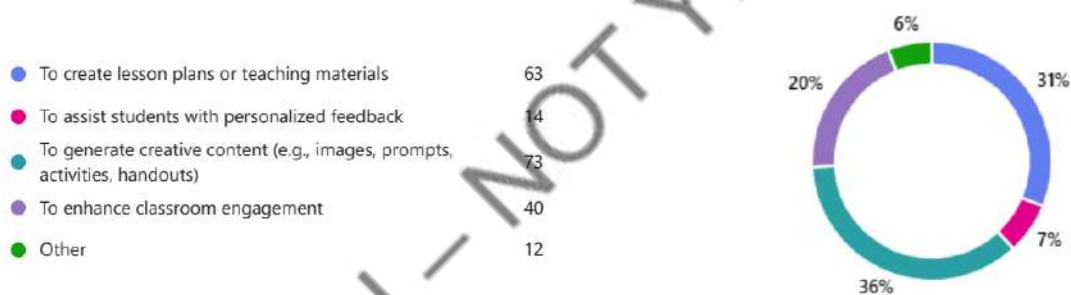


Figure 52: Educators - Ways they use Generative AI in the classroom

Have you attended any training or workshops on the use of GenAI in education?



Figure 53: Educators - Participation in training or workshops on using Generative AI in education

Where did you first learn about GenAI tools?

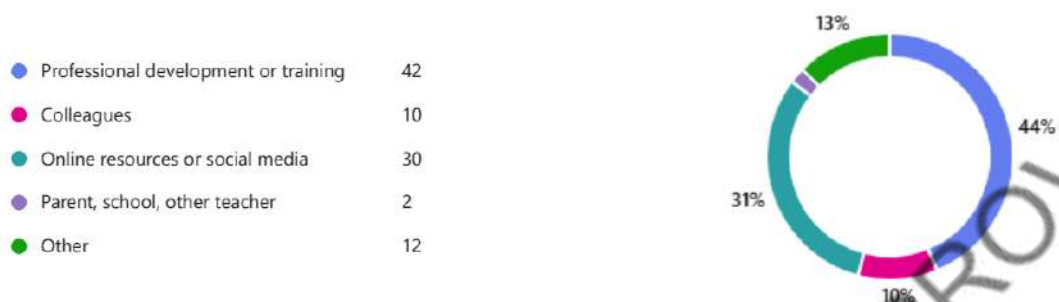


Figure 54: Educators - Where first learned about Generative AI tools

How effective do you find GenAI tools in supporting your teaching?



Figure 55: Educators - Views on the effectiveness of GenAI tools in supporting their teaching

What challenges have you faced when using/considering using GenAI tools? (Select all that apply)

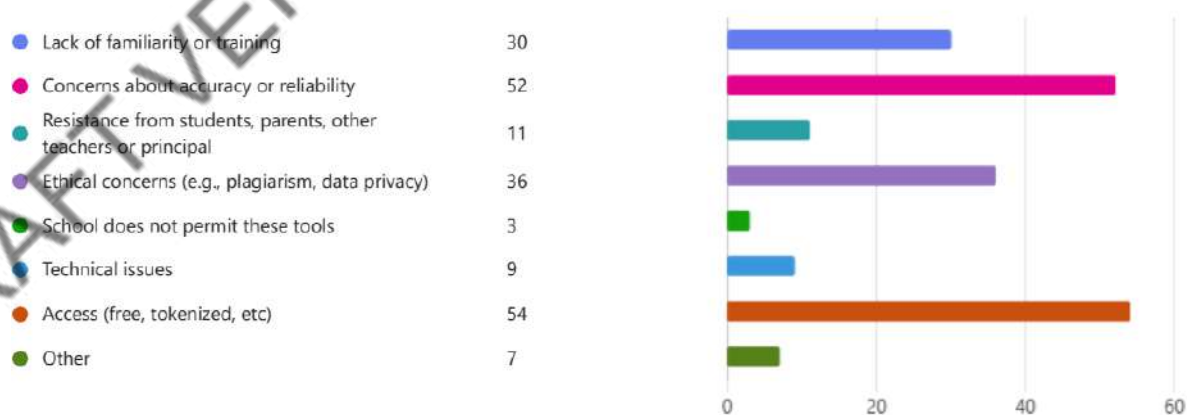


Figure 56: Educators - Challenges they faced by when using or considering GenAI tools in education

How concerned are you about the potential misuse of GenAI in the classroom (e.g., plagiarism, over-reliance by students)?



Figure 57: Educators - Concerns about the potential misuse of GenAI in the classroom

How concerned are you about the possibility of parts of educators' role being replaced by GenAI tools?



Figure 58: Educators - Concerns about parts of their role being replaced by GenAI tools

What is your opinion on the following statement:
The benefits of GenAI outweigh its risks in education.



Figure 59: Educators - Opinions on whether the benefits of GenAI outweigh its risks in education

. What percentage of your students do you believe is using GenAI tools for educational purposes (e.g., for homework, projects)?



Figure 60: Educators - Beliefs about the percentage of students using GenAI tools for educational purposes

How do you think your students use GenAI for educational purposes? (Check all that apply)

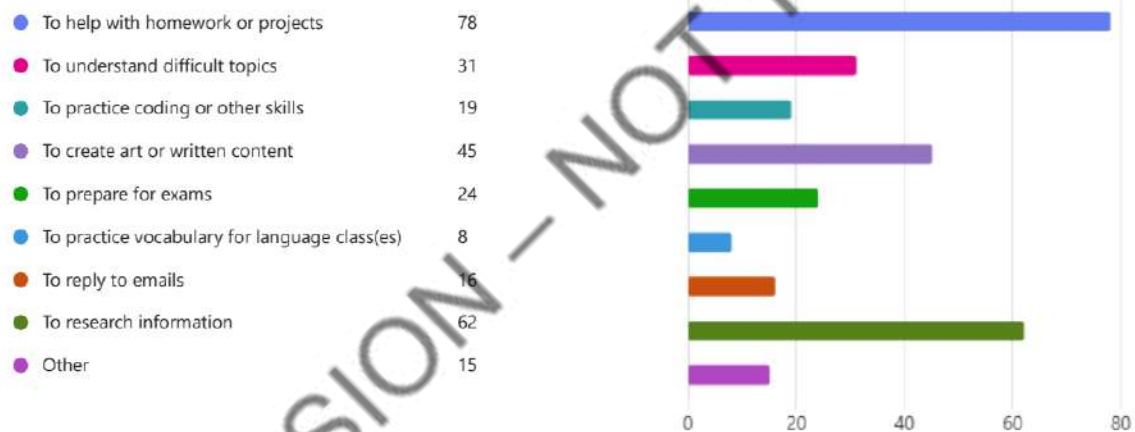


Figure 61: Educators - Perceptions of how their students use GenAI for educational purposes

. How do you feel about students using GenAI for learning purposes?



Figure 62: Educators - Attitudes toward students using GenAI for learning purposes

What potential risks do you see in incorporating GenAI tools in education? (Select all that apply)

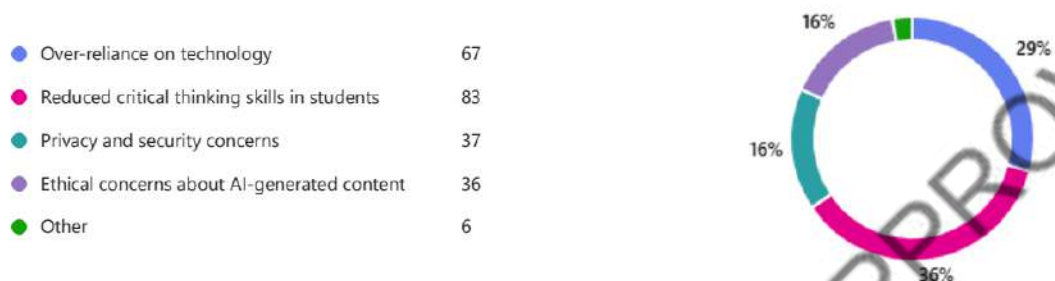


Figure 63: Educators - Potential risks perceived in incorporating GenAI tools in education

What guidelines or policies do you think should be in place for the use of GenAI in the classroom? (Select all that apply)

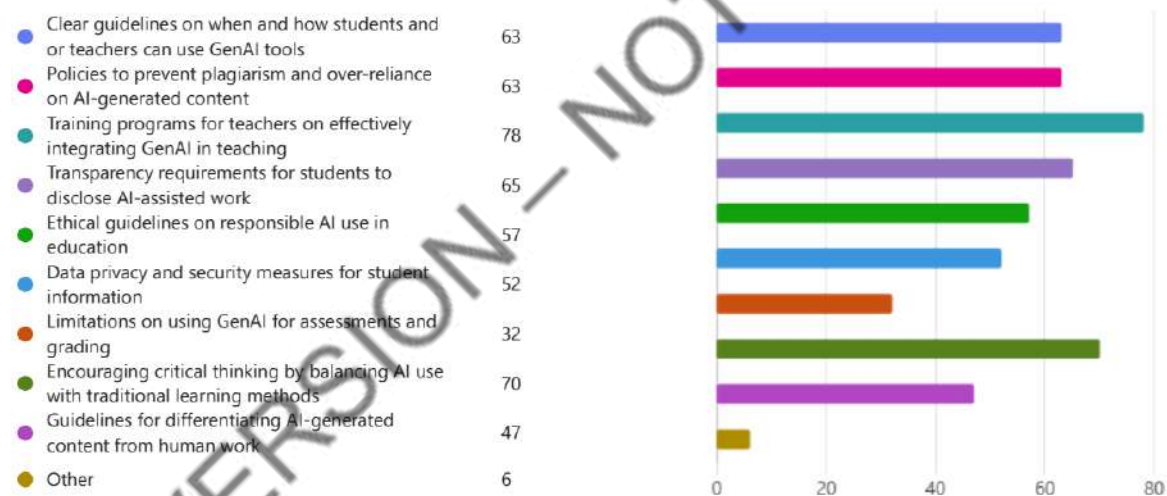


Figure 64: Educators - Guidelines and policies suggested for GenAI use in the classroom

What tools, trainings or resources would help you feel more confident in integrating GenAI into your teaching? (Select all that apply)

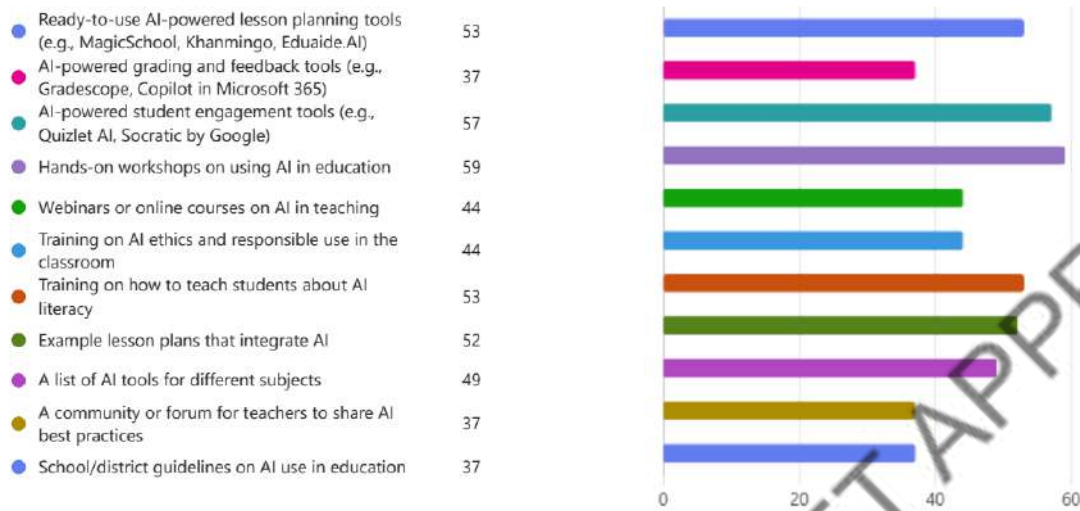


Figure 65: Educators - Tools, trainings, and resources that would increase confidence in integrating GenAI into teaching

How likely are you to use a platform with personalized recommendations for GenAI educational tools?



Figure 66: Educators - Likelihood of using a platform with personalized recommendations for GenAI educational tools

Which features would you like this platform to include? (select all that apply)

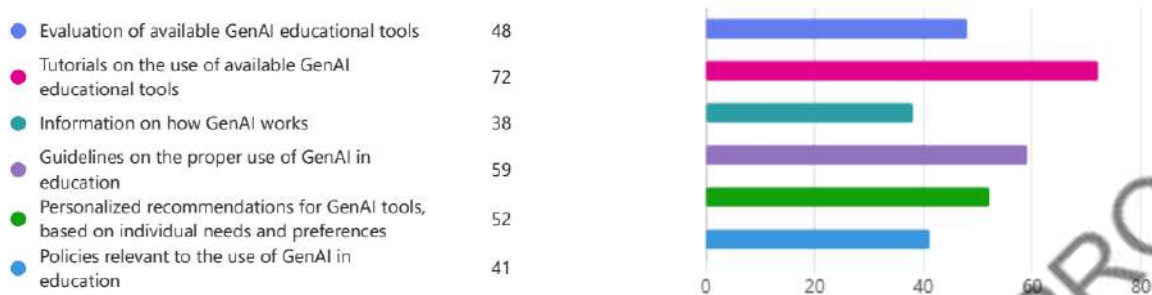


Figure 67: Educators - Desired features for a GenAI educational platform

11.1.2 Workshops' charts

11.1.2.1 Educators Workshop responses

Which quick-start homepage for the platform do you find more helpful?

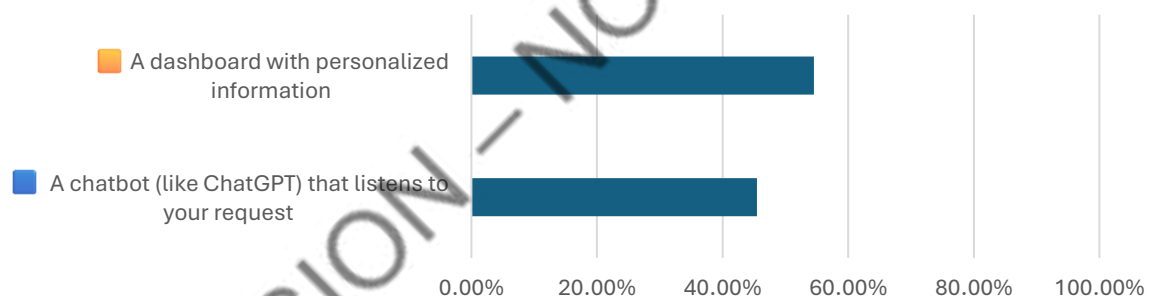


Figure 68: Educators - Preferred quick-start homepage for the platform

Is it important for you to continue from where you left off in your last session?

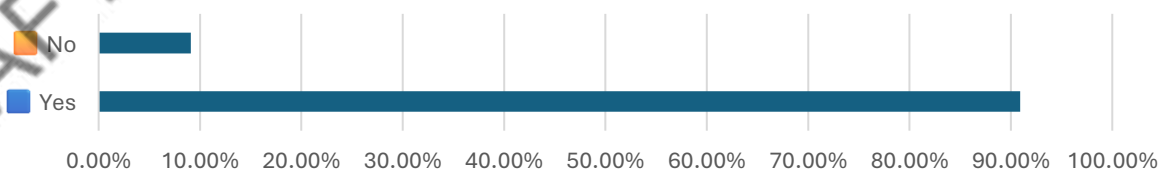


Figure 69: Educators - Importance of continuing from the last session in the platform

Do you believe that using the platform could enhance student autonomy and improve your collaboration with...

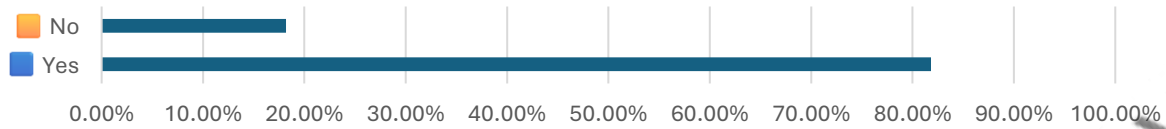


Figure 70: Educators - Belief that the platform enhances student autonomy and collaboration

Which sections do you consider most useful in a training hub?

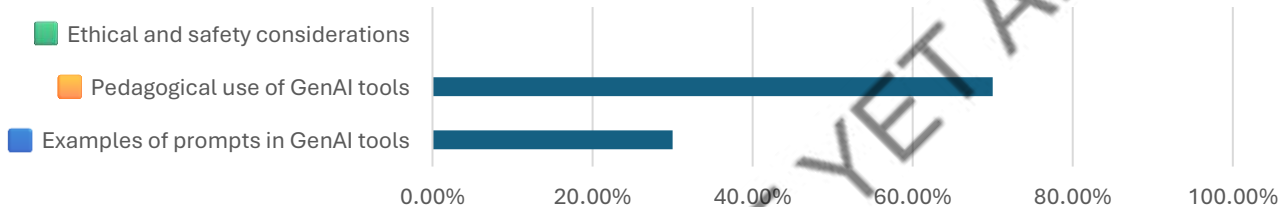


Figure 71: Educators - Most useful training hub sections

How would you prefer to access the training material?

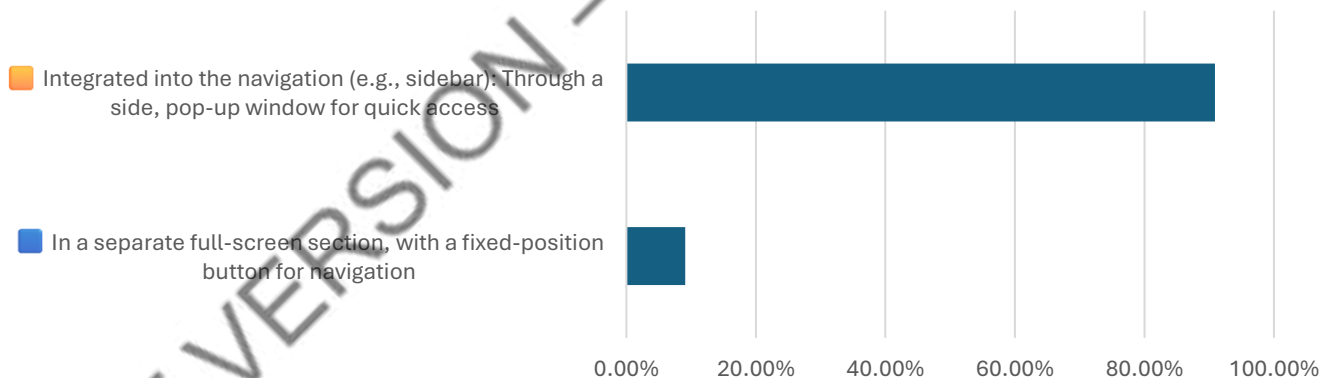


Figure 72: Educators - Preferred way to access training material

Would you be interested in viewing your progress across the training modules?

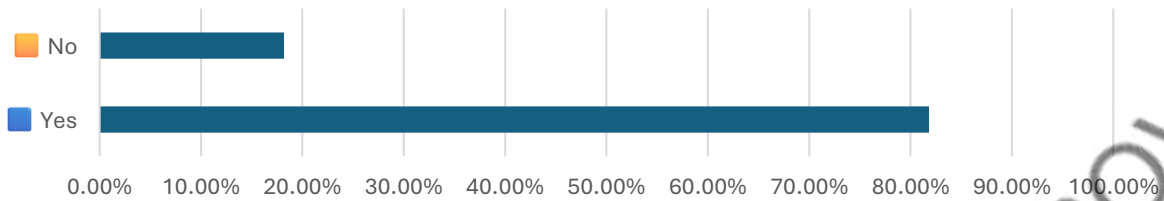


Figure 73: Educators - Interest in tracking progress across training modules

Would you find a search function within the training material useful?

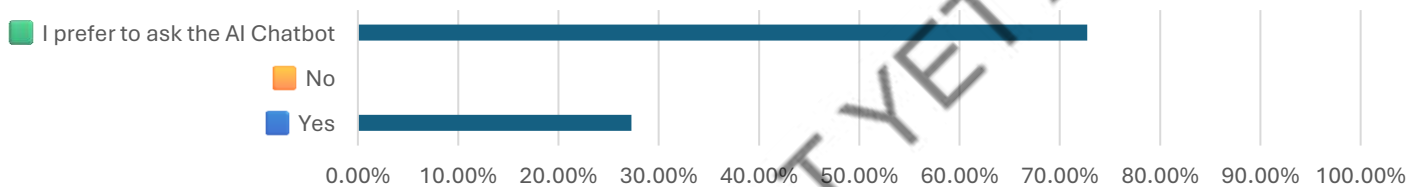


Figure 74: Educators - Usefulness of a search function within training material

Which tone would suit you best for the platform's digital assistant (AI Chatbot)?

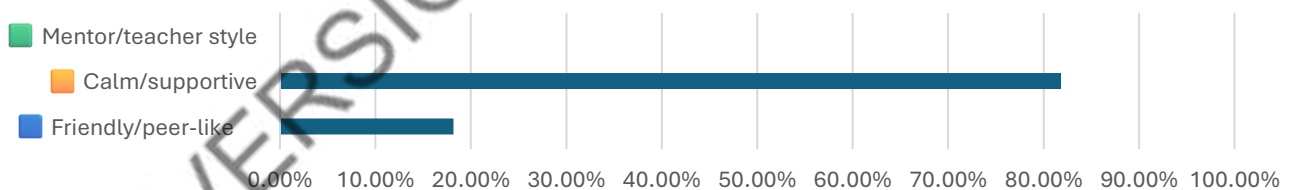


Figure 75: Educators - Preferred tone for the platform's digital assistant (AI Chatbot)

Would you like the AI Chatbot, in addition to providing tailored tool usage suggestions, to also answer questions about how to use those tools?

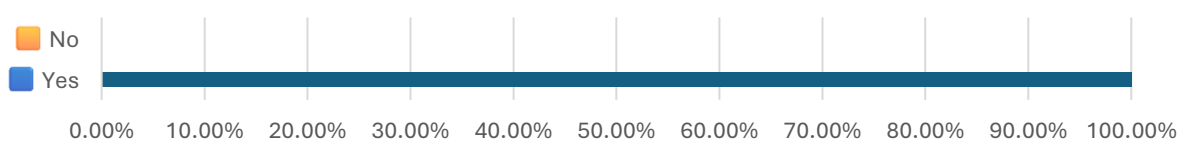


Figure 76: Educators - Preference for AI Chatbot to also answer questions about tool usage

Would it be helpful if the platform suggested content based on your usage or interests?

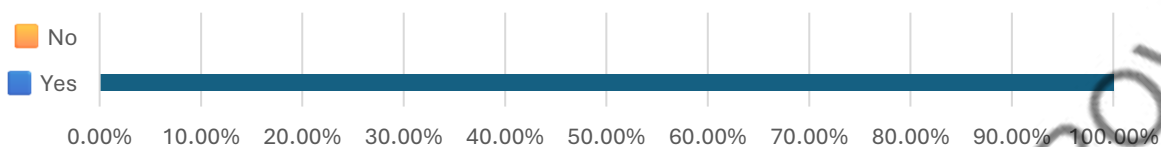


Figure 77: Educators - Helpfulness of platform suggesting content based on usage or interests

How important is it for you to know whether an AI tool is suitable for students?

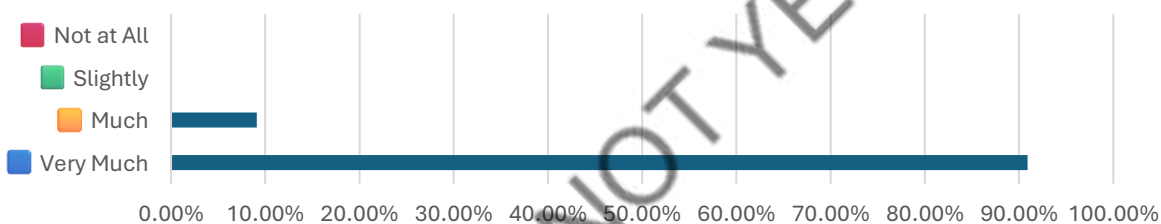


Figure 78: Educators - Importance of knowing whether an AI tool is suitable for students

What login method would you prefer the platform to offer?

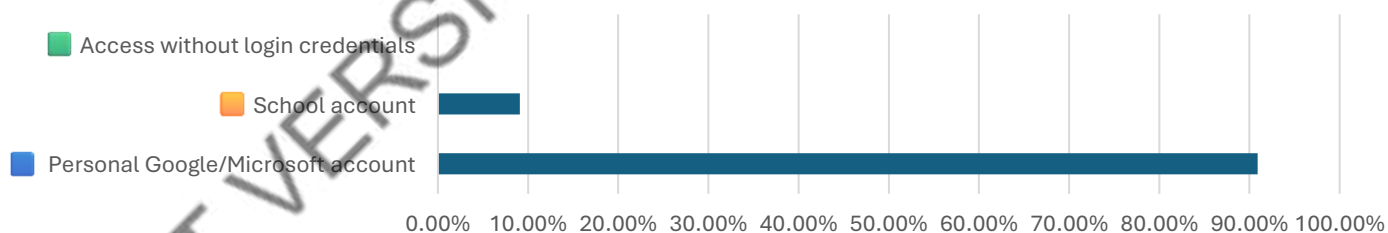


Figure 79: Educators - Preferred login method for accessing the platform

To what extent do you feel that such a platform meets your needs as an educator?

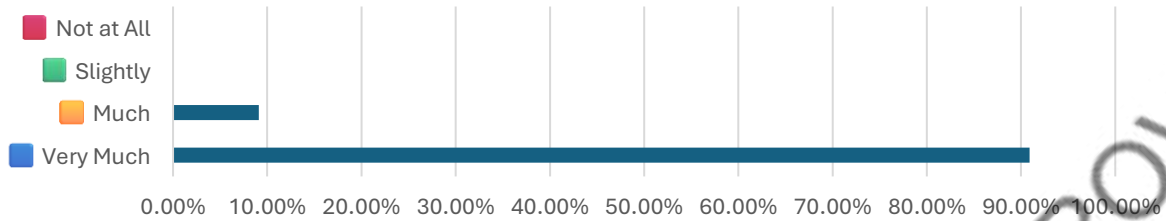


Figure 80: Educators - Extent to which the platform meets their needs

Would a weekly summary of your usage statistics with visual graphs within the platform be helpful to you?

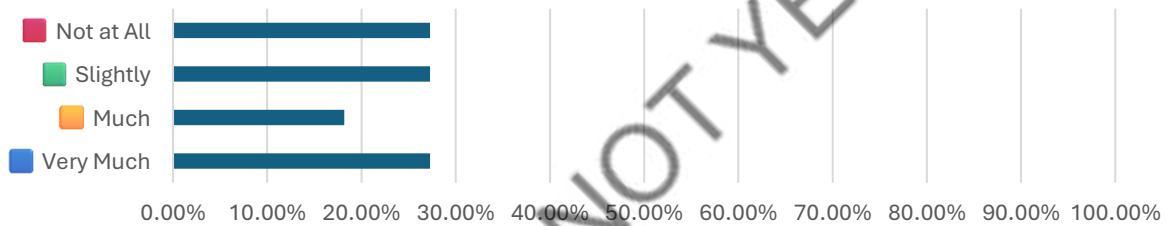


Figure 81: Educators - Usefulness of weekly usage summaries with visual graphs

How often do you believe you would visit the platform's training section?

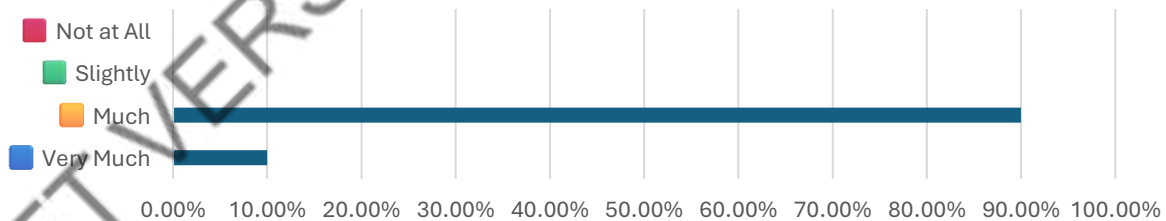


Figure 82: Educators - Frequency of visiting the platform's training section

Would you prefer the platform's training material (training hub) to be freely accessible without requiring prior login?

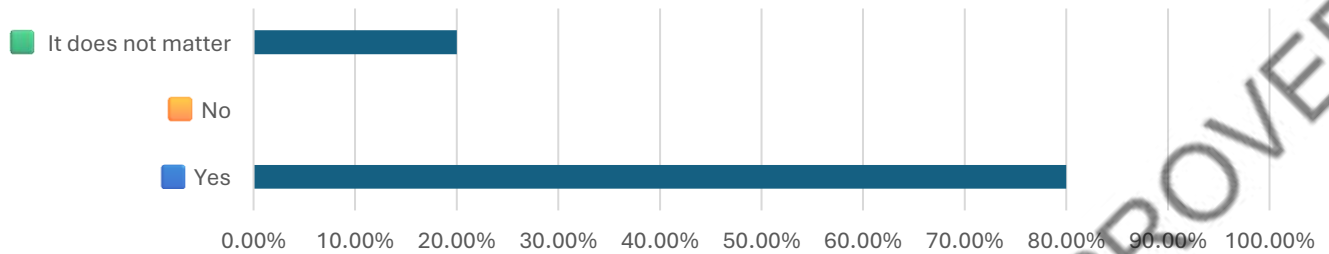


Figure 83: Educators - Preference for training materials to be freely accessible without login

What features would you like the chatbot to offer? (Select up to 2)

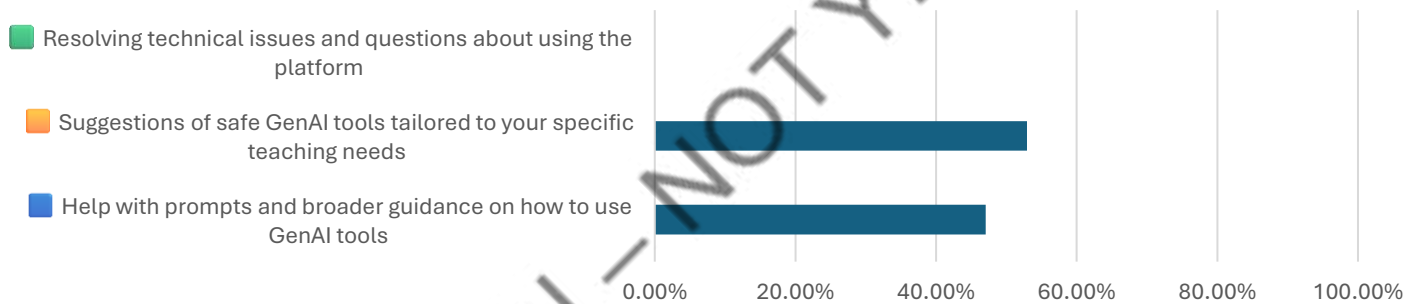


Figure 84: Educators - Preferred features for the platform's chatbot

Would you be interested in having a space for communication and sharing best practices with other educators?

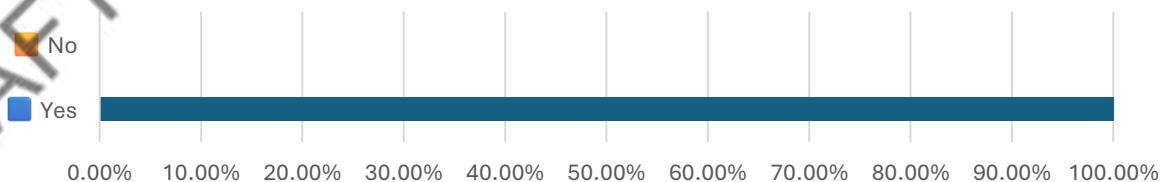


Figure 85: Educators - Interest in a space for communication and sharing best practices

How would you prefer to access the communication space, if available?

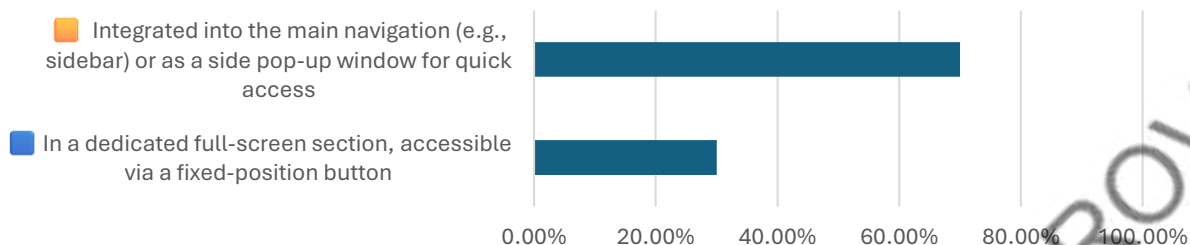


Figure 86: Educators - Preferred way to access the communication space

Would you like to see a dashboard that presents all available GenAI tools along with ratings of their effectiveness based on usage type?

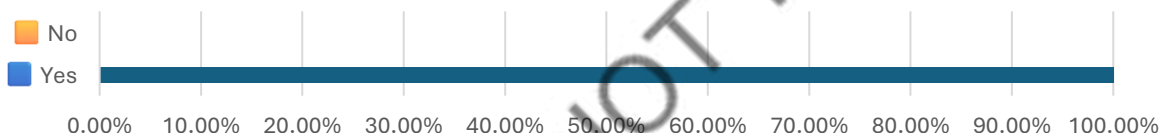


Figure 87: Educators - Interest in a dashboard showing GenAI tools with effectiveness ratings

How would you prefer the platform to request your feedback after using a suggested GenAI tool?

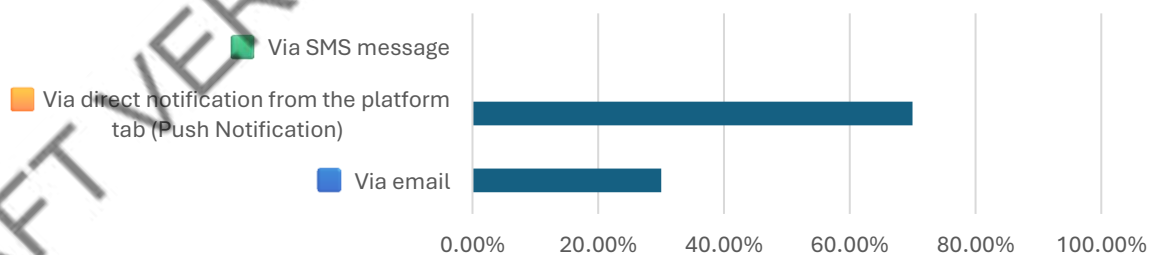


Figure 88: Educators - Preferred method for providing feedback after using a GenAI tool

When would you prefer to receive a reminder to evaluate a GenAI tool you were recommended and have used?

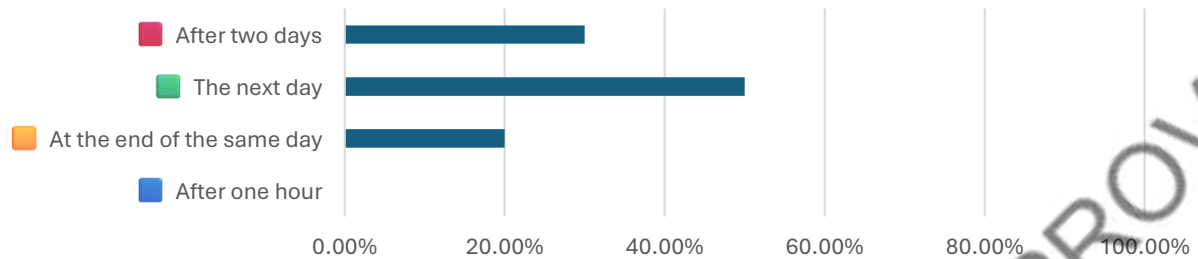


Figure 89: Educators - Preferred timing for receiving reminders to evaluate a recommended GenAI tool

Would you like the platform to be accessible and fully functional on mobile devices as well?

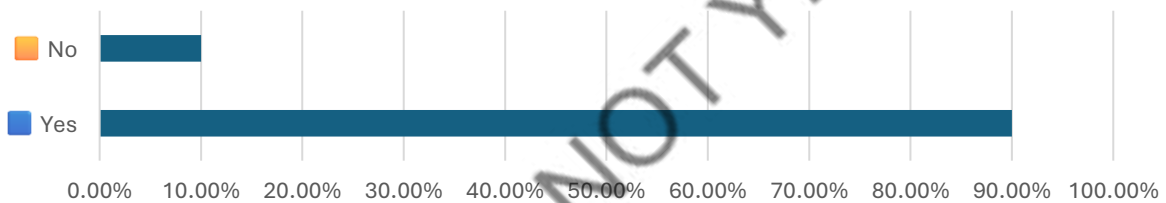


Figure 90: Educators - Preference for the platform to be fully functional on mobile devices

11.1.2.2 Parents Workshop responses

Would you be interested in using GenAI tools to prepare or review exercises together with your child?

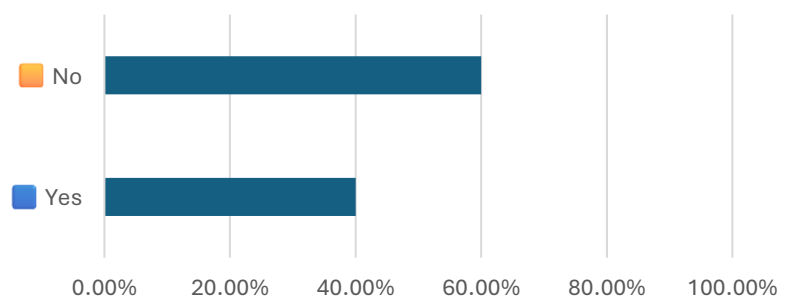


Figure 91: Parents - Interest in using GenAI tools with their child

Do you believe that using the platform could strengthen your child's autonomy and improve your collaboration together?

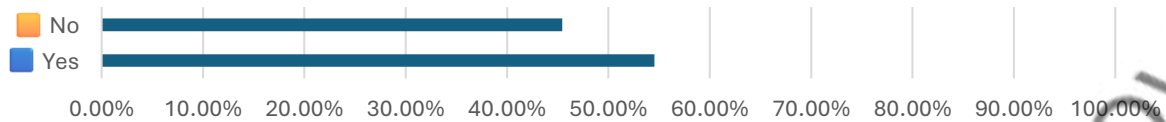


Figure 92: Parents - Belief that the platform could strengthen child autonomy and collaboration

Which welcome screen would make you feel the most supported?

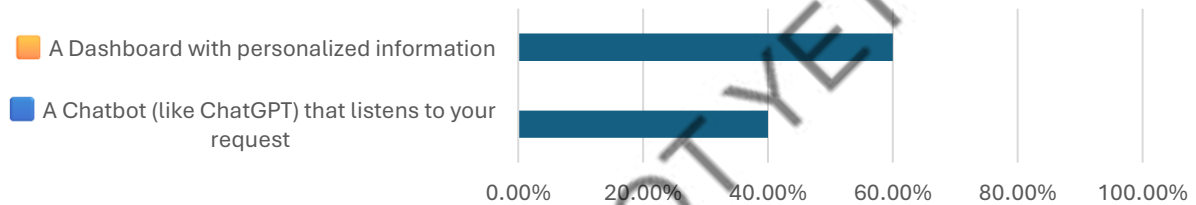


Figure 93: Parents - Preferred type of welcome screen

If the platform had a Chatbot, which use would make you feel most comfortable?

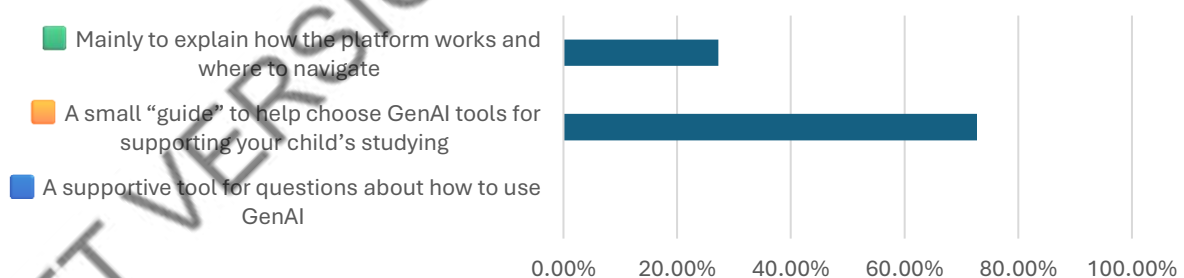


Figure 94: Parents - Preferred use of platform's AI Chatbot Assistant

What type of updates about your or your child's use of the platform would you consider useful?

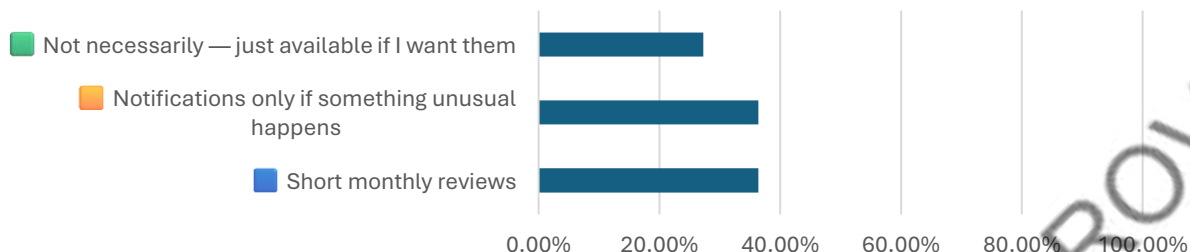


Figure 95: Parents - Preferred type of updates about their or their child's platform use

How would you prefer to find information about GenAI tools?

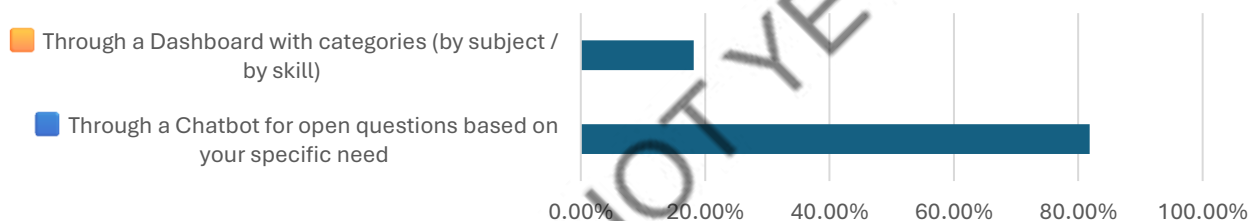


Figure 96: Parents - Preferred way to find information about GenAI tools

Would you be interested in having access to information on how to use GenAI tools?

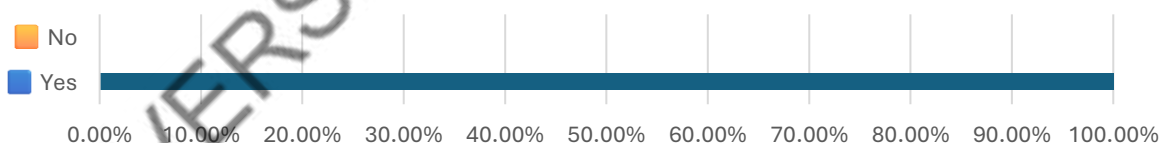


Figure 97: Parents - Interest in accessing information on how to use GenAI tools

Is it important for you to be able to continue from where you left off in your last session?

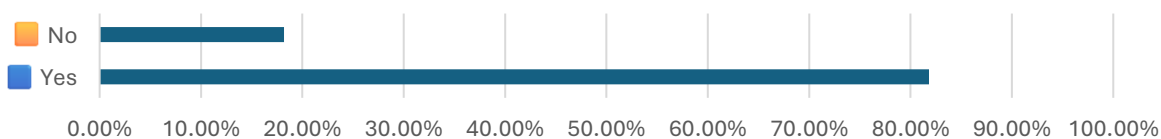


Figure 98: Parents - Importance of continuing from where they left off in the last session

Which sections would you find most useful in a training hub?

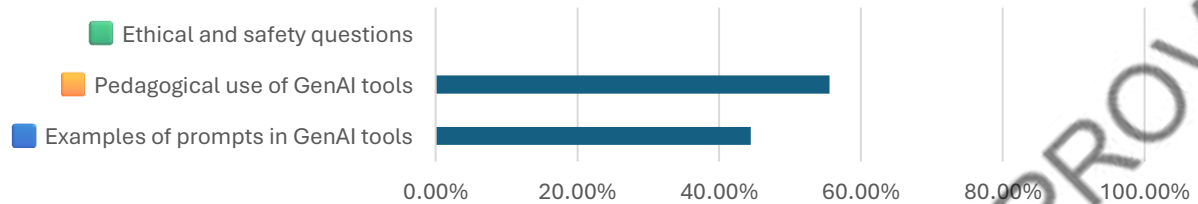


Figure 99: Parents - Sections considered most useful in a training hub

How would you prefer to access the training material?

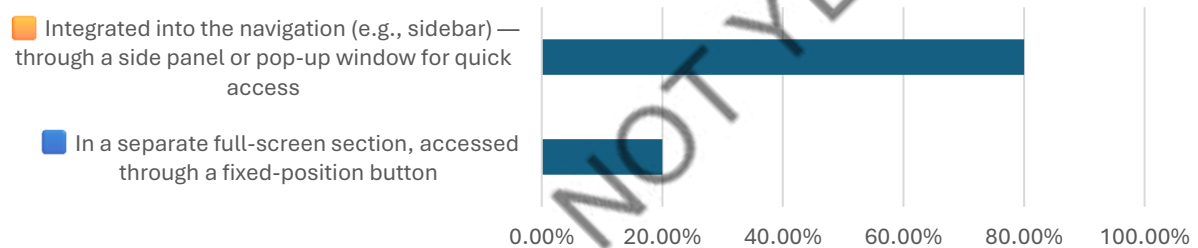


Figure 100: Parents - Preferred way to access the training material

Would you find a search function within the training material useful?

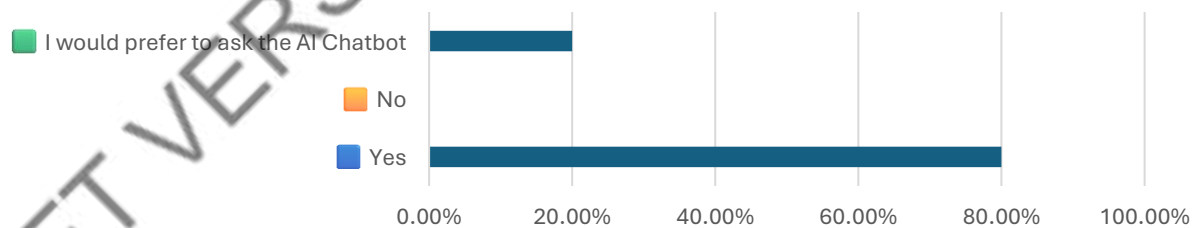


Figure 101: Parents - Usefulness of a search function within the training material

Which style would suit you best for the platform's digital assistant (AI Chatbot)?

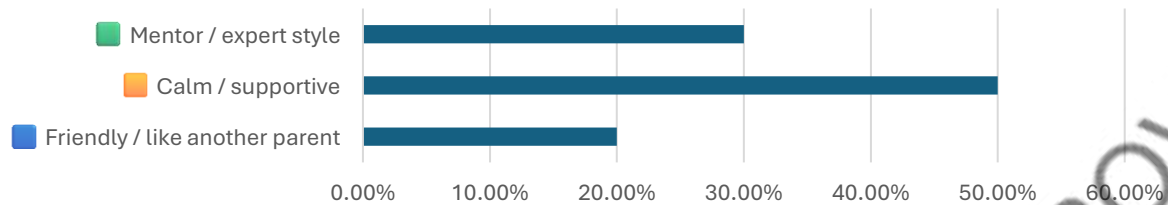


Figure 102: Parents - Preferred style for the platform's digital assistant (AI Chatbot)

Would you like the AI Chatbot, beyond giving specialized tool recommendations, to also answer questions about how to use them?

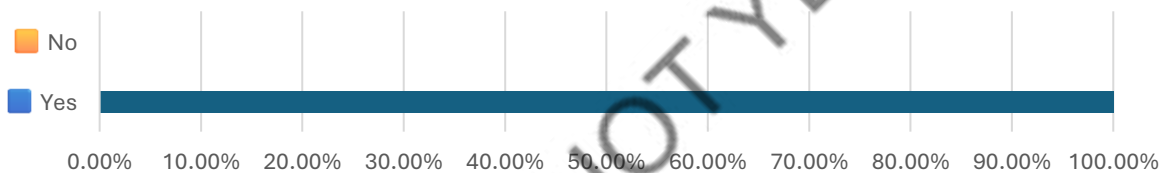


Figure 103: Parents - Expectations of AI Chatbot beyond tool recommendations

To what extent do you feel that such a platform responds to your needs as a parent supporting your child?

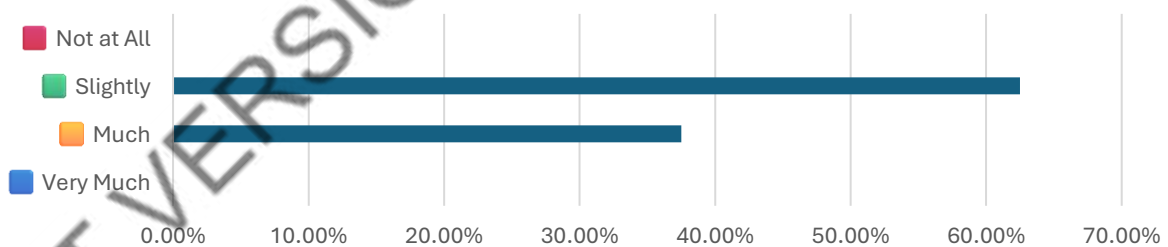


Figure 104: Parents - Extent to which the platform meets parental needs

Would a weekly summary with your usage statistics shown as charts within the platform be helpful to you?

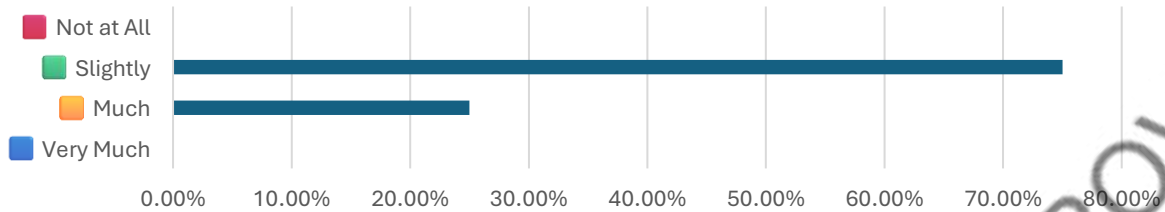


Figure 105: Parents - Usefulness of weekly usage summaries with charts

How often do you think you would visit the training area with GenAI tool resources on the platform?

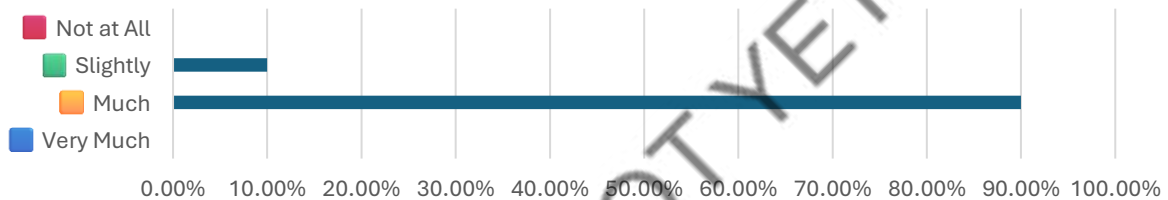


Figure 106: Parents - Frequency of visiting the platform's training area with GenAI resources

Would you like the platform's training material (training hub) to be freely accessible without requiring you to log in first?

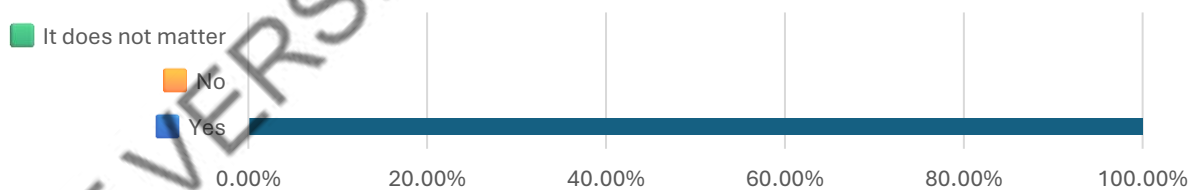


Figure 107: Parents - Preference for accessing training materials without login requirements

If there were a parents' forum or community, which format would suit you best?

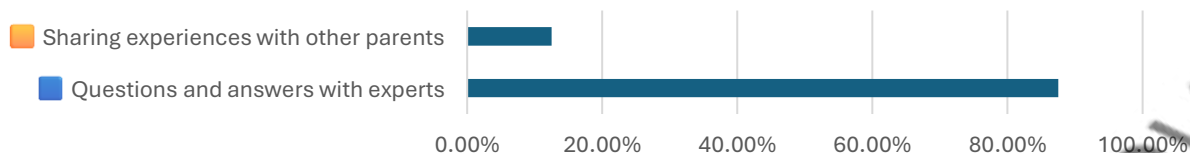


Figure 108: Parents - Preferred format for a forum or community on the platform

How would you prefer to access the communication space, if it existed?

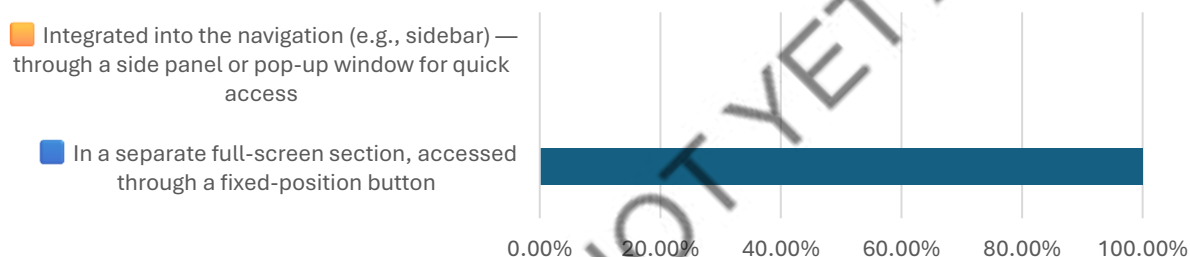


Figure 109: Parents - Preferences for accessing the platform's communication space

Would you like to see a dashboard that presents all available GenAI tools along with ratings of their effectiveness based on usage type?

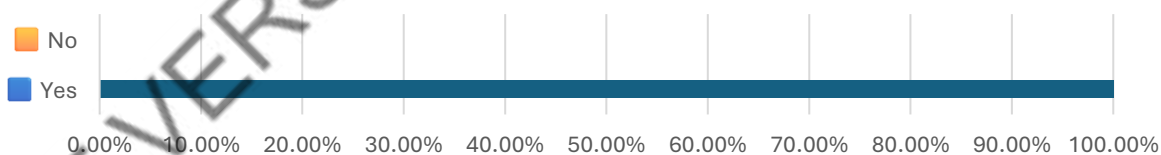


Figure 110: Parents - Interest in a dashboard showing GenAI tools with effectiveness ratings by usage type

How would you prefer the platform to request your feedback after using a suggested GenAI tool?

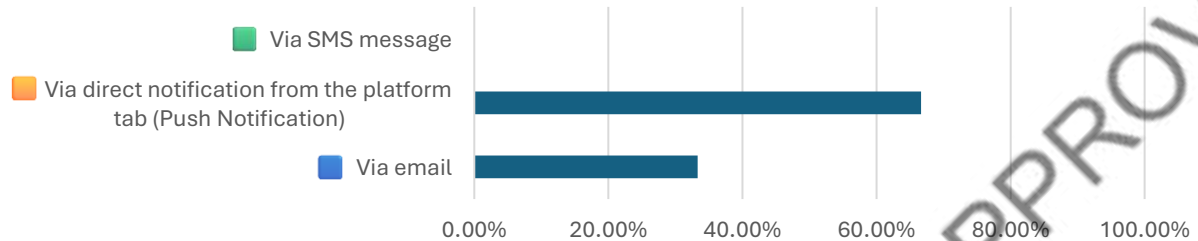


Figure 111: Parents - Preferred way for the platform to request feedback after using a GenAI tool

When would you prefer to receive a reminder to evaluate a GenAI tool you were recommended and have used?

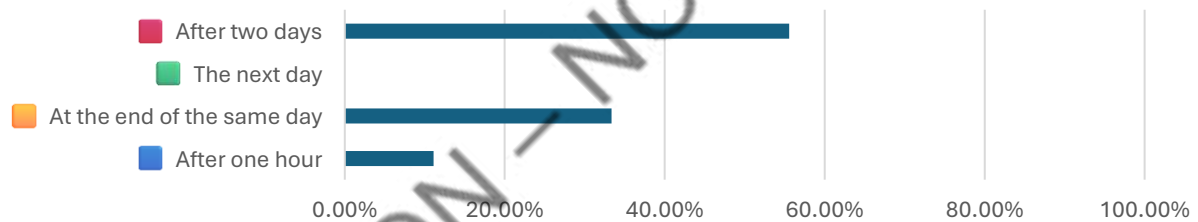


Figure 112: Parents - Preferred timing for reminders to evaluate a recommended GenAI tool

Would you like the platform to be accessible and fully functional on mobile devices as well?

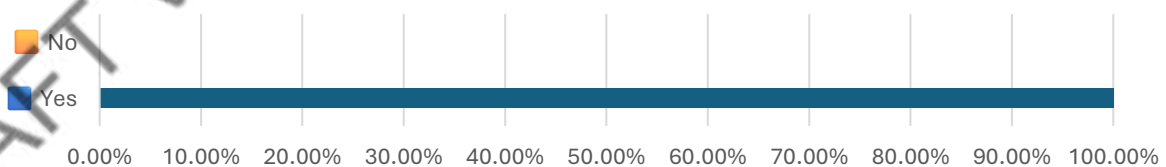


Figure 113: Parents - Interest in having the platform fully functional on mobile devices

11.1.2.3 Students Workshop responses

Which quick-start homepage for the platform do you find more helpful?

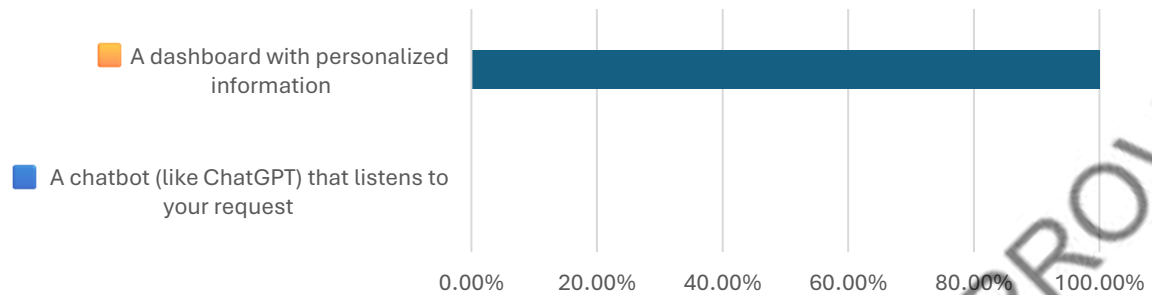


Figure 114: Students - Preferred type of welcome screen

Is it important for you to continue from where you left off in your last session?

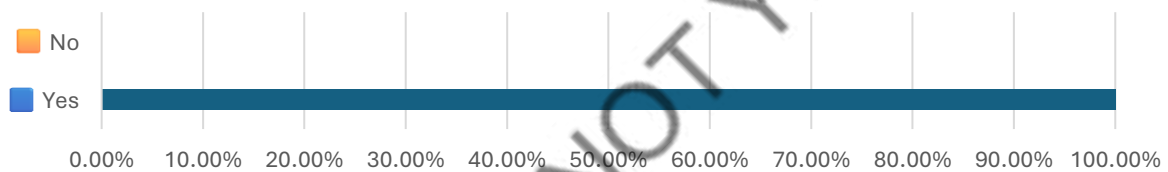


Figure 115: Students - Importance of continuing from last session

How much choice would you like to have in customizing how the platform looks?

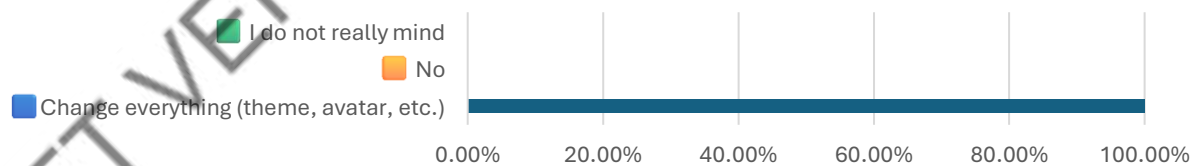


Figure 116: Students - Desired level of customization for platform appearance

Which type of information would you find most useful in the platform's training hub?

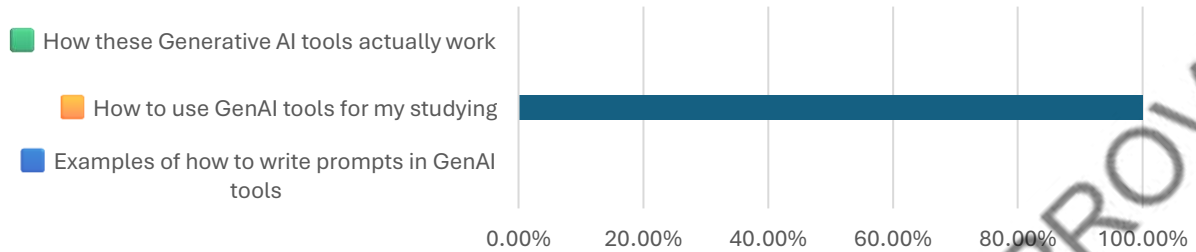


Figure 117: Students - Most useful type of information in the training hub

How would you prefer to access the training material?

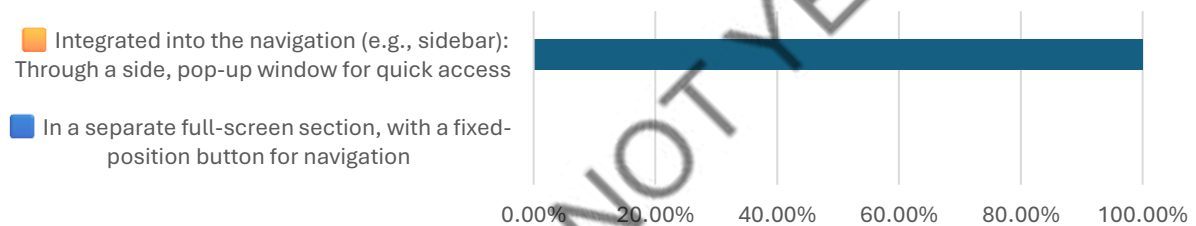


Figure 118: Students - Preferred way to access training material

Would you be interested in viewing your progress across the training modules?

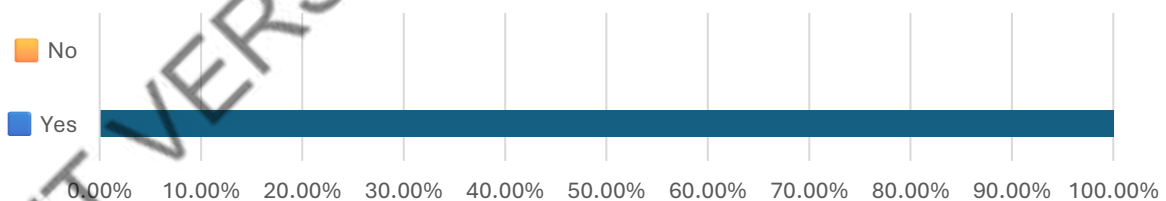


Figure 119: Students - Interest in tracking progress across training modules

Would you find a search function within the training material useful?

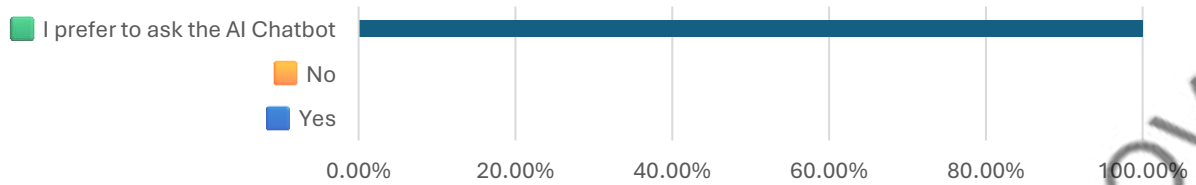


Figure 120: Students - Usefulness of a search function within training material

For what reasons would you use the digital assistant (AI Chatbot)? (Choose up to 2)

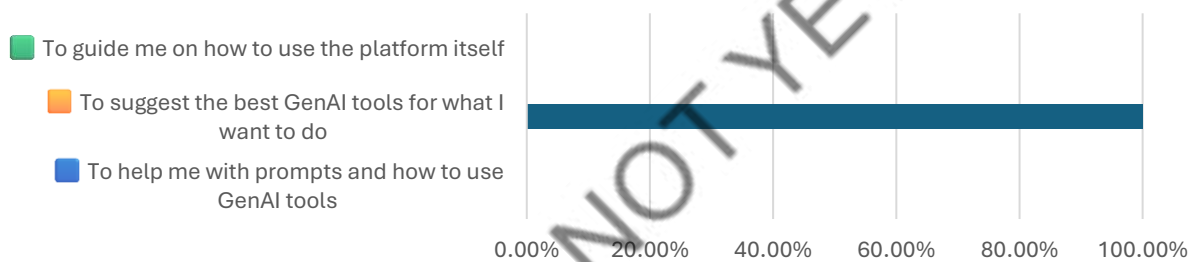


Figure 121: Students - Reasons for using the digital assistant (AI Chatbot)

Which style would suit you best for the chatbot?

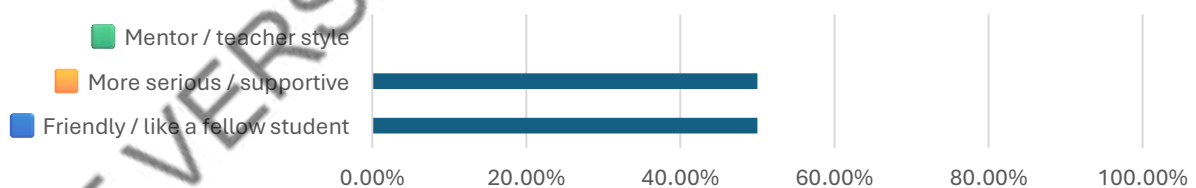


Figure 122: Students - Preferred chatbot style

Would you like the AI Chatbot, beyond just giving you the tools, to also answer your questions about how to use them better?

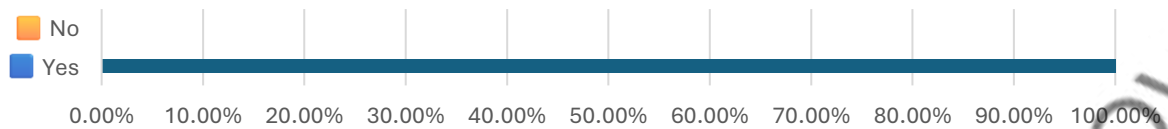


Figure 123: Students - Desire for chatbot to also explain tool usage

Would you like the platform to suggest tools or sections based on what you use the most?

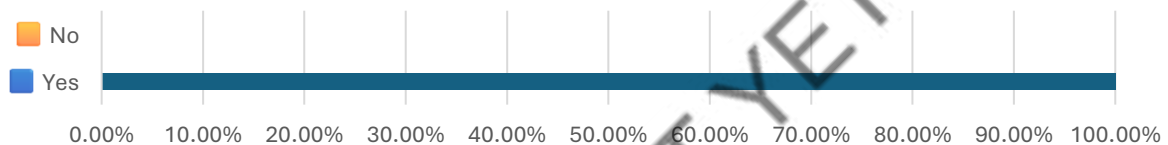


Figure 124: Students - Preference for platform to suggest tools/sections based on usage

What login method would you prefer the platform to offer?

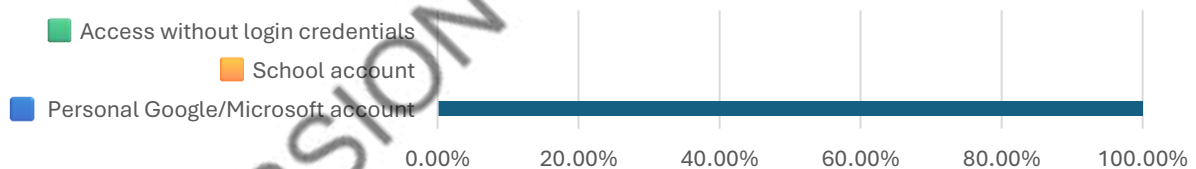


Figure 125: Students - Preferred login method for accessing the platform

Do you feel that a platform recommending suitable GenAI tools for your studying would be helpful to you?

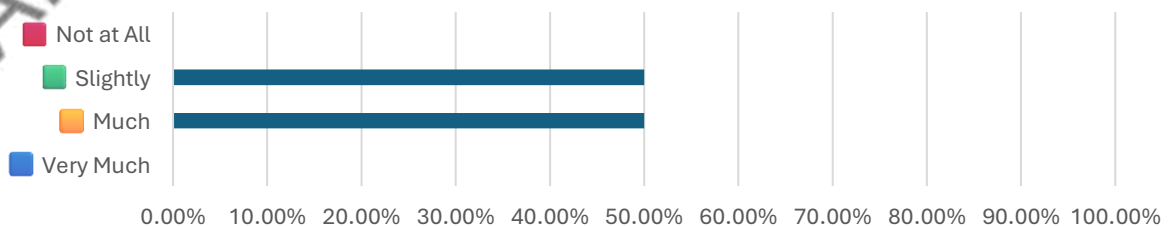


Figure 126: Students - Usefulness of platform recommending suitable GenAI tools for studying

Would a weekly summary of your usage statistics with visual graphs within the platform be helpful to you?

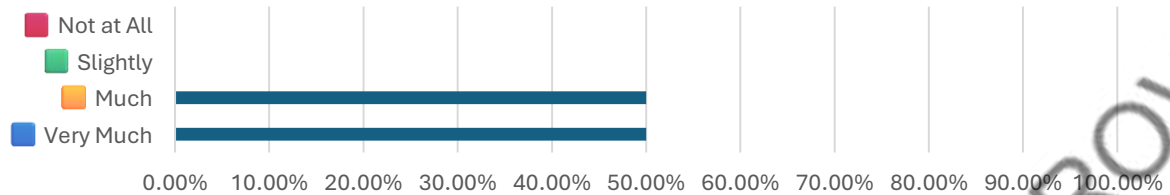


Figure 127: Students - Helpfulness of weekly usage summary with visual graphs

How often do you believe you would visit the platform's training section?

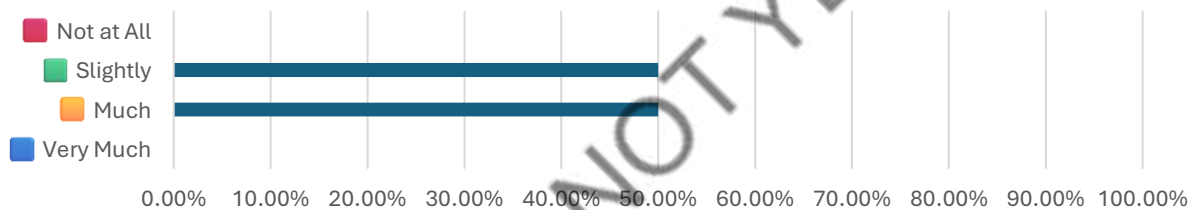


Figure 128: Students - Frequency of visiting the platform's training section

Would you prefer the platform's training material (training hub) to be freely accessible without requiring prior login?

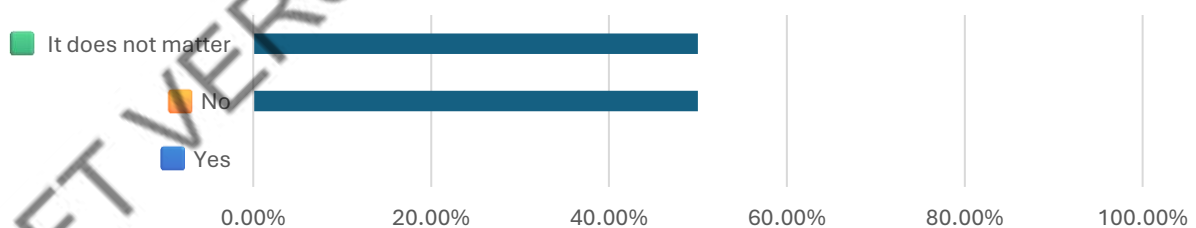


Figure 129: Students - Preference for accessing training hub without prior login

Would you be interested in having a space for communication and exchanging opinions with other students or teachers?

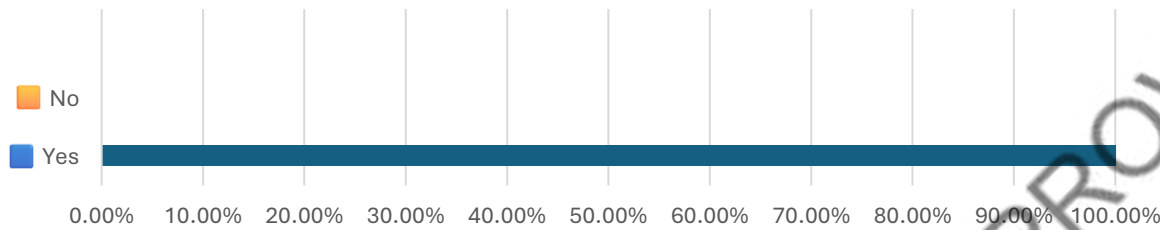


Figure 130: Students - Interest in a space for communication with peers and teachers

How would you prefer to access the communication space, if available?

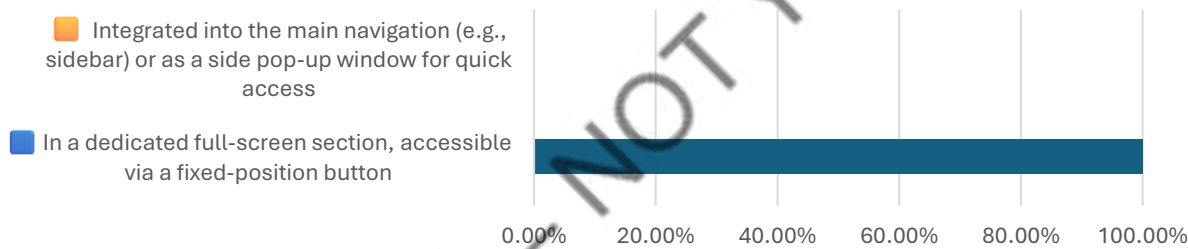


Figure 131: Students - Preferred way to access the communication space

Would you like to see a dashboard that presents all available GenAI tools along with ratings of their effectiveness based on usage type?

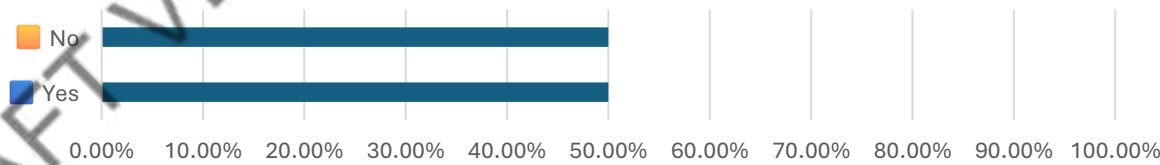


Figure 132: Students - Interest in a dashboard showing GenAI tools with effectiveness ratings

How would you prefer the platform to request your feedback after using a suggested GenAI tool?

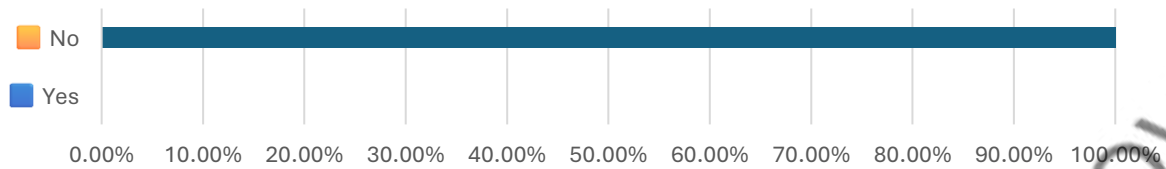


Figure 133: Students - Preference for how the platform should request feedback after using a GenAI tool

When would you prefer to receive a reminder to evaluate a GenAI tool you were recommended and have used?

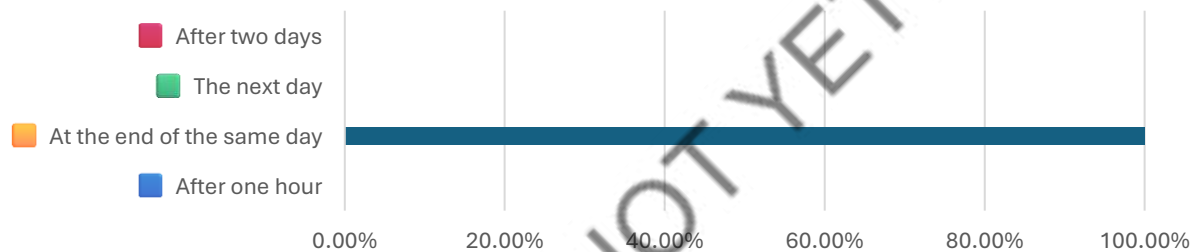


Figure 134: Students - Preferred timing for reminders to evaluate recommended GenAI tools

Would you like the platform to be accessible and fully functional on mobile devices as well?

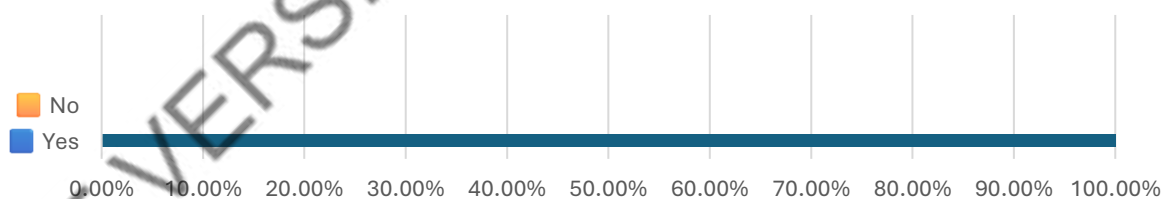


Figure 135: Students - Importance of mobile accessibility for the platform

Which of the following would make you want to return to such a platform? (choose up to 2)

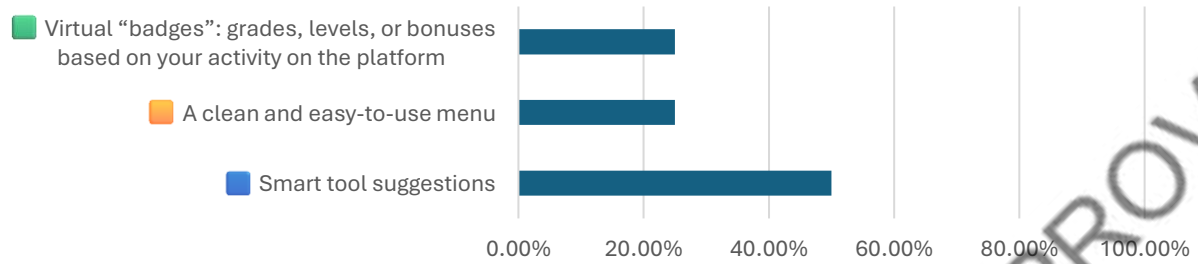
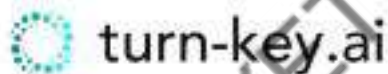


Figure 136: Students - Factors motivating return to the platform

Project Partners



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