

Key Stage 1 Teachers

AI augmenting lesson planning, resource creation, and some administrative tasks.

EXPOSURE 35 Moderate exposure	WINDOW 4–9 yrs until change lands	ADOPTION TODAY Low-Medium	READING Augmented more than re-placed. Exposure is the share of today's work AI can plausibly take on within the window.
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§ 01WHAT IS HAPPENING

What is happening to key stage 1 teachers

Impact	AI tools can assist Key Stage 1 teachers by generating ideas for age-appropriate activities, creating draft worksheets or visual aids, helping with basic differentiation of materials, and streamlining some administrative tasks like parent communication drafts or record keeping. Direct AI interaction with young children is limited and highly supervised.
Risk	Workflow augmentation for preparation; core teaching relies on human interaction, empathy, and developmental expertise. The role of a Key Stage 1 Teacher will be augmented by AI, primarily in the preparation and administrative aspects of their work. AI will not replace the crucial direct interaction, nurturing, patience, and expertise in early childhood development required to teach foundational literacy, numeracy, and social-emotional skills. The teacher's role in fostering a supportive, engaging classroom environment remains paramount.
Sector readiness	Emerging & Carefully Considered AI tools for early years education are emerging, often focused on providing re-sources for teachers or adaptive learning games for children (used with guidance). Adoption is cautious due to developmental appropriateness, screen time concerns, and data privacy for young children.

§ 02 POSITION

Where you stand

- i The core of Key Stage 1 teaching, focused on direct human interaction, nurturing, and foundational skill development, is highly resistant to AI replacement.
- ii AI will primarily serve as a supportive tool for teachers, assisting with lesson planning, resource creation, differentiation of materials, and some administrative tasks.
- iii The teacher's role as a facilitator of learning, a role model for socio-emotional skills, and an expert in early childhood development will become even more critical. Ethical and age-appropriate use of any AI tool is paramount.

§ 03 ACTIONS

15 POINTS

What this means for you

Concrete changes to how the work gets done, in the order you are likely to meet them.

- 01 **AI for Lesson Idea Generation & Activity Planning.** Use AI tools to brainstorm age-appropriate themes, activities, and craft ideas for literacy, numeracy, and other Key Stage 1 subjects.
- 02 **Creating Differentiated Learning Materials.** Employ AI to help create variations of worksheets, reading passages, or simple games tailored to different learning levels within your classroom.
- 03 **Generating Visual Aids & Classroom Resources.** Utilize AI to create simple illustrations, flashcards, or visual elements for classroom displays or learning materials.
- 04 **Assistance with Drafting Parent Communications.** AI can help draft initial versions of newsletters, updates, or common communications to parents, which you then personalize and review.
- 05 **Automated Story Starters or Creative Writing Prompts.** Use AI to generate imaginative story starters or writing prompts suitable for young children to inspire creative expression.
- 06 **Finding Age-Appropriate Online Resources.** AI-powered search might help you find suitable educational videos, interactive games, or online stories more efficiently.
- 07 **Focus on Direct Instruction & Foundational Skill Building.** With AI assisting in prep, more time can be dedicated to direct teaching of phonics, early reading, number sense, and basic math concepts.
- 08 **Nurturing Socio-Emotional Development.** The core role of fostering empathy, cooperation, emotional regulation, and social skills in young children remains entirely human-led.
- 09 **Observation & Assessment of Young Learners.** While AI might offer basic progress tracking tools, your direct observation and nuanced assessment of each child's development is key.

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- 10 **Classroom Management & Creating a Positive Learning Environment.** Human skills in managing a classroom of young children, creating a safe and stimulating environment, are irreplaceable.
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- 11 **Adapting AI-Generated Content for KS1 Appropriateness.** Critically reviewing any AI-generated material to ensure it is developmentally appropriate, accurate, and aligns with your teaching philosophy.
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- 12 **Communicating with Parents about Learning & Development.** Providing personalized feedback to parents based on your observations and assessments.
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- 13 **Managing Physical Classroom & Play-Based Learning.** Organizing learning centers, facilitating hands-on activities, and guiding play-based learning are key human roles.
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- 14 **Addressing Individual Student Needs & Providing Support.** Identifying and supporting children with specific learning challenges or emotional needs through direct interaction.
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- 15 **Ethical Considerations of AI with Young Children.** Being mindful of data privacy, screen time, and the appropriateness of any AI tools used with or for young learners.
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§ 04 CAUSES

10 DRIVERS

What is pushing this change

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- 01 **Desire for Personalized Learning Resources for Young Children.** AI can help teachers create or find varied materials to cater to the diverse learning paces and styles of young children.
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- 02 **Need to Reduce Teacher Administrative & Preparation Time.** AI can assist with drafting communications, creating worksheets, or finding resources, allowing teachers more time for direct student interaction.
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- 03 **Availability of AI Tools for Content Creation & Idea Generation.** Generative AI can provide teachers with a starting point for lesson ideas, stories, or visual aids suitable for young learners.
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- 04 **Focus on Early Literacy & Numeracy Development.** AI tools can generate simple phonics games, math exercises, or reading comprehension questions.
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- 05 **Growth of EdTech Platforms for Early Years.** A growing number of educational technology companies are developing AI-assisted resources tailored for early elementary education.
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- 06 **Parental Interest in Technology-Enhanced Learning (Balanced).** Some parents are keen for their children to engage with technology, but this is balanced by concerns about excessive screen time.
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- 07 **Data Privacy & Child Safety Concerns Shaping AI Adoption.** The ethical use of AI and the protection of young children's data are paramount, influencing how and which AI tools are adopted.
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- 08 **Teacher Workload & Need for Efficient Resource Finding.** AI can help teachers quickly find relevant educational content online or generate basic materials, saving prep time.
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- 09 **Development of Age-Appropriate AI Interfaces (Emerging).** For AI tools to be directly used by young children, they need very simple, intuitive, and safe interfaces, which are still in development.
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Emphasis on Play-Based and Experiential Learning (AI as a supplement). AI is seen as a potential tool to supplement hands-on learning with interactive digital activities, not replace physical play.

Impact by sector

The headline figure is an average. Where you work changes the picture.

Year 1 Teachers (Focus on foundational literacy/numeracy)	AI for generating phonics activities, simple reading passages, number games. Strong focus on human-led, play-based learning.
Year 2 Teachers (Building on foundations, more complex concepts)	AI for creating slightly more complex math problems, story writing prompts, or basic research support (guided). Human focus on developing deeper understanding.
Teachers with High Numbers of SEN/EAL Students	AI for generating differentiated materials, visual aids for EAL students, or simple adaptive learning exercises. Human expertise in SEN strategies is critical.
Teachers in Tech-Forward/Pilot Schools	More likely to experiment with AI learning platforms, interactive whiteboards with AI, or AI for student progress tracking.
Teachers in Resource-Constrained Settings	AI could be valuable for quickly generating free or low-cost teaching resources, worksheets, or lesson ideas if access to tech is available.

Skills to build

The skills that keep the human part of this work valuable as the routine part is automated.

- 01
- Early Childhood Pedagogy & Developmental Knowledge.** Deep understanding of how young children learn, developmental milestones, and effective teaching strategies for foundational skills.
- 02
- Empathy, Patience & Nurturing Abilities.** The ability to connect with, understand, and support the emotional and learning needs of young children in a caring manner.
- 03
- Classroom Management & Creating a Positive Learning Environment.** Creating a safe, engaging, and structured classroom where young children can learn and thrive.
- 04
- Communication with Young Children & Parents.** Clearly explaining concepts to young children, actively listening to them, and effectively communicating progress and concerns to parents.

- 05 **Observational & Assessment Skills for Early Learners.** Accurately observing children's learning, behavior, and social interactions to assess their progress and identify any needs for support.
- 06 **Creativity in Lesson Planning & Activity Design (AI-assisted).** Designing imaginative and engaging lessons and activities, potentially using AI for inspiration or to generate initial resource drafts.
- 07 **Basic Digital Literacy & Ability to Evaluate EdTech Tools.** Comfort using basic educational technology and the ability to critically assess whether AI tools are age-appropriate and beneficial for young learners.
- 08 **Fostering Socio-Emotional Learning.** Actively teaching and modeling skills like sharing, cooperation, managing emotions, and building positive relationships.

§ 07 INSTRUMENTS

11 ENTRIES

Tools in use

KINDS OF TOOL WORTH KNOWING

- 01 **AI-Powered Resource Generators for Teachers.** Websites or tools that use AI to help teachers generate lesson ideas, activity sheets, or find age-appropriate content.
- 02 **Adaptive Learning Platforms (for basic skills, supervised).** Software that provides individualized practice in foundational literacy or numeracy, adjusting difficulty based on student performance (used under teacher guidance).
- 03 **Generative AI for Story Starters & Creative Prompts.** LLMs used to create imaginative prompts for storytelling or drawing activities for young children.
- 04 **AI for Creating Simple Visual Aids or Worksheets.** Tools that can help teachers quickly create simple illustrations, flashcards, or formatted worksheets.
- 05 **Communication Platforms with AI Drafting Assistance (for parent comms).** Email or school communication platforms that might offer AI suggestions for drafting routine messages to parents.
- 06 **Interactive Whiteboard Software (may have AI features).** Classroom technology that may incorporate AI for interactive activities or content presentation.

NAMED TOOLS ALREADY IN USE

MagicSchool AI / Curipod / Diffit (for lesson planning & material generation)

AI platforms designed to assist teachers in creating lesson plans, assessments, and various educational materials.

Khan Kids / ABCmouse.com (some adaptive features for early learning)

Educational apps for young children that often include some level of adaptive learning to adjust to the child's pace (used with supervision).

ChatGPT / Google Bard (for teachers to generate ideas/drafts, not direct student use)

Generative AI tools that teachers can use as a personal assistant for brainstorming lesson ideas, drafting text, or creating activity prompts.

Canva (with AI Magic Design for visuals)

Graphic design platform with AI features that can help teachers quickly create visually appealing classroom materials.

ClassDojo / ParentSquare (communication platforms, AI features may be emerging)

School-parent communication platforms which may in the future incorporate more AI for drafting messages or summarizing updates.

In practice

Ways people in this role are already using AI, and what they get from it.

Generate Ideas for Thematic Units with AI EXAMPLE 1	HOW	Input a theme like "Spring" or "Community Helpers" into an AI tool and ask for age-appropriate lesson ideas, craft activities, and related storybook suggestions.
	GAIN	Saves significant planning time, provides fresh inspiration for lessons, and helps you cover curriculum objectives in engaging ways.
Create Differentiated Phonics Worksheets EXAMPLE 2	HOW	Use an AI tool to take a standard phonics worksheet and quickly generate easier and more challenging versions to cater to different learning levels in your class.
	GAIN	Allows you to more easily cater to the diverse learning needs in your classroom, providing appropriate challenges and support for all students.
Use AI to Draft a Class Newsletter to Parents EXAMPLE 3	HOW	Provide an AI writing assistant with key updates and upcoming events for the week to generate a first draft of your class newsletter, which you then personalize and review.
	GAIN	Reduces time spent on routine administrative communications, ensuring parents are kept informed efficiently.
Find Age-Appropriate Educational Videos or Games EXAMPLE 4	HOW	Use AI-enhanced search or specific EdTech platforms to find videos or interactive games that align with your current learning objectives and are suitable for KS1 students.
	GAIN	Helps you quickly find high-quality, relevant digital resources to supplement your teaching and engage students.

Get Story Starters for Creative Writing Sessions EXAMPLE 5	HOW	Ask a generative AI tool for five imaginative opening sentences for a story about a "lost kitten" or "a magical tree" to spark your students' creativity.
	GAIN	Provides a quick and easy way to kickstart creative writing activities, overcoming "blank page" syndrome for young writers.

§ 09 CONTEXT

How this role compares

Three neighbouring roles chosen to show the direction of travel.

Administrative School Clerks (Routine data entry, scheduling) MORE EXPOSED	AI IMPACT	High (AI can automate student record updates, basic parent communication templates, and simple scheduling tasks)
	WORK MOVES TO	Role likely to see significant task automation, requiring upskilling to manage AI systems or take on more complex office management.
Educational Technologists / AI in EdTech Curriculum Designers DIFFERENT SKILLS, GROWING	AI IMPACT	Foundational (They design and develop the AI-powered educational tools and learning platforms that teachers might use)
	WORK MOVES TO	Deep skills in AI/ML, instructional design, software development, and understanding of pedagogy for various age groups.
Child Psychologists / Early Years Speech Therapists COMPLEMENTARY, LESS EXPOSED	AI IMPACT	Low-Moderate Augmentation (AI for assessment data analysis, some therapy game ideas), but core diagnostic, therapeutic interaction, and individualized intervention are deeply human-centric.
	WORK MOVES TO	Specialized clinical expertise, deep understanding of child development and psychology, and high-touch therapeutic relationships.

§ 10 VERDICT

Closing judgement

For Key Stage 1 Teachers, AI offers helpful assistance for planning and resource creation, freeing up more time for what matters most: direct interaction, nurturing individual students, fostering social-emotional growth, and building a love of learning through human connection and expert pedagogy. The teacher remains the irreplaceable heart of the early years classroom.

Evidence and revisions

What the exposure figure rests on, what changed when it was last revised, and the published work cited for this role.

SCORE

25 to 35

WINDOW

5-10 years to 4-9 years

The 4 October 2026 review moved the score up by 10 points.

Microsoft's AI applicability score for the matching occupation is 0.19, in the upper half of 785 US occupations; Anthropic's observed exposure (the share of the occupation's tasks already being done with Claude) is 0.10, which is modest by the standards of the 756 occupations measured; the US Bureau of Labor Statistics places it in the 'high' AI-exposure tier; BLS projects employment to fall 0.4% over 2025–35. Blending our 2025 editorial figure (60%) with the 2026 evidence composite (40%) moves the score from 25 to 35 and shortens the window from 5-10 years to 4-9 years.

MEASURES BEHIND THE SCORE

US Bureau of Labor Statistics · *Employment Projections 2025–35 and AI Exposure Categories* (27 August 2026)
AI-exposure tier: High. Projected employment change 2025–35: -0.4%. Matched to Elementary school teachers, except special education.

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Microsoft Research · *Working with AI: Measuring the Applicability of Generative AI to Occupations* (10 July 2025)
AI applicability score 0.19 (percentile 66 of 785 occupations) for SOC 25-2021.

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Anthropic · *Anthropic Economic Index report: Cadences* (26 June 2026)
Observed exposure 0.10 for SOC 25-2021 (percentile 77 of 756 occupations).

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UK Department for Science, Innovation and Technology · *Assessment of AI capabilities and the impact on the UK labour market* (28 January 2026)
UK context: around 70% of UK workers are in occupations with tasks AI could perform or enhance, above the US average; a one-standard-deviation rise in exposure was associated with a 3.9% fall in UK job postings.

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ALSO CITED FOR THIS ROLE

International Monetary Fund · *Bridging Skill Gaps for the Future: New Jobs Creation in the AI Age* (14 January 2026)
Teaching is treated as high-complementarity work: AI changes preparation and assessment tasks while the in-person role persists.

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OECD · OECD Employment Outlook 2026 (7 July 2026)

OECD evidence points to transformation rather than displacement in education, with teacher shortages persisting across member countries.

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<https://www.careerguard.ai/sources>

§ 12 APPENDIX

Method and sources

Each report was written from a large body of published research and then, in October 2026, re-scored against occupation-level evidence: the US Bureau of Labor Statistics AI-exposure classification and 2025–35 projections, Microsoft Research's AI applicability scores and Anthropic's observed-exposure data, cross-checked against the reports listed in the Evidence section above. The organisations and publications below are the standing literature behind the narrative sections. Every source, with dates, licences and archived copies where we are permitted to hold them, is catalogued in the research library.

Scores are revised by blending the previous editorial figure (60%) with a composite of the three occupation-level measures (40%), capped at fifteen points per revision and rounded to the nearest five. The window shifts one notch when a score moves ten points or more. Hand adjustments are recorded with their reason in the revision log.

I GLOBAL AND MACROECONOMIC IMPACT OF AI ON WORK

World Economic Forum

The Future of Jobs Report series — Employer survey of expected job growth and decline, skill shifts and technology adoption (2020, 2023 and 2025 editions); *Artificial Intelligence and the Future of Entry-Level Work* (2026).

AI governance and transformation reports — Frameworks on ethical AI, talent strategy and industry transformation.

McKinsey Global Institute

AI, Automation and the Future of Work series — Research quantifying automation potential by task, sector and demographic, from "Jobs Lost, Jobs Gained" to "Agents, robots, and us" (2025).

Industry-specific reports — Financial services, healthcare, manufacturing and others.

PwC

Global AI Jobs Barometer — Annual analysis of job postings and productivity by AI exposure (2024–2026 editions).

Upskilling Hopes and Fears survey — Employee perceptions and readiness.

Microsoft Research and Anthropic

Working with AI (2025); *Anthropic Economic Index (2025–2026)* — Occupation-level usage data from Copilot and Claude conversations, the two observed-usage measures behind the 2026 revision.

Stanford Digital Economy Lab and Stanford HAI

Canaries in the Coal Mine? (2025–2026); *AI Index Report (annual)* — Payroll evidence on early-career employment in exposed occupations; annual measurement of AI capability, investment and adoption.

Deloitte

Human Capital Trends series — Workforce, talent and HR technology trends.

Tech Trends series — Emerging technologies and their business implications.

Accenture

Technology Vision series — Forward-looking analysis of emerging technology, with emphasis on AI.
Fjord Trends — Design, innovation and human experience in a digital world.

Boston Consulting Group

AI/ML insights and industry solutions — "The AI Revolution in the Workplace" and related research.

EY

AI and workforce reports — Adoption, talent strategy and ethics.

IBM Institute for Business Value

AI and automation studies — Business models, workforce evolution and leadership.

OECD

AI Policy Observatory — International data and policy on AI, labour markets and skills.
Employment Outlook — Labour-market trends including technological impact (2023–2026 editions).

International Labour Organization

Generative AI and Jobs: A Refined Global Index of Occupational Exposure (2025) — Task-level exposure gradients for every ISCO occupation; successor to the 2023 global index.

International Monetary Fund

Staff Discussion Notes on AI and work (2024, 2026) — Complementarity framing: where AI augments and where it substitutes.

UK Department for Science, Innovation and Technology

Assessment of AI capabilities and the impact on the UK labour market (2026) — UK occupational exposure and job-posting evidence.

Brookings Institution

AI and automation research — Economic and social implications, displacement and skills.

Yale Budget Lab and Goldman Sachs Research

Tracking the Impact of AI on the Labor Market; AI and the US labour market (2026) — Aggregate labour-market monitoring; macro displacement estimates.

Oxford University (Oxford Martin School)

The Future of Employment — Frey & Osborne and subsequent research on susceptibility to automation.

MIT Technology Review

AI & Work — Reporting on AI research and its implications for industries and jobs.

Gartner

Hype Cycle for Artificial Intelligence — Maturity and adoption of AI technologies.
Future of Work reports — Workplace models and talent strategy.

U.S. Bureau of Labor Statistics

Employment Projections 2025–35; AI Exposure Categories; Occupational Outlook Handbook — Ten-year employment projections and, from the 2025 cycle, an AI-exposure tier for every detailed occupation.

Indeed Hiring Lab

AI at Work Report (2025) and posting-market updates — Skill-level transformation estimates and job-posting trends by occupation.

II CORE AI AND MACHINE-LEARNING RESEARCH

OpenAI

Research papers, blog and API documentation — Large language models, generative AI, safety and societal impact.

Google DeepMind

Research papers and blog — Reinforcement learning, AI for science, AGI and ethics.

Meta AI

Research papers and blog — Large language models, computer vision, AI for social good.

Hugging Face

Transformers library and model hub — Open-source state-of-the-art NLP models.

TensorFlow and PyTorch

Documentation and community forums — Core frameworks illustrating practical capability.

arXiv

cs.AI, cs.LG, cs.CV, cs.CL — Pre-print research.

NeurIPS and ICML

Conference proceedings — Top-tier academic research.

ACM and IEEE

Journals and proceedings — ACM Computing Surveys; IEEE Transactions on AI.

Kaggle

Datasets and competition solutions — Applied machine learning on real-world problems.

The Alan Turing Institute

Research and reports — Responsible and applied AI.

III ETHICAL AND RESPONSIBLE AI DEPLOYMENT

NIST

AI Risk Management Framework — Voluntary framework for managing AI risk.

European Commission

AI Act — Risk-tiered legal framework for AI.

Ethics Guidelines for Trustworthy AI — Principles for responsible development.

Partnership on AI

Research and best practice — Responsible AI development.

AI Now Institute

Annual reports — Social implications: power, inequality, rights.

ACM FAccT

Proceedings — Fairness, accountability and transparency.

Data & Society

Publications — Social implications of data-centric technology.

WIPO

Conversation on IP and AI — Intellectual-property implications of AI.

IEEE Global Initiative on Ethics of AI/IS

Ethically Aligned Design — Recommendations for ethical AI design.

Center for AI and Digital Policy

Policy briefs — Accountable AI policy.