

LIVING AND LEARNING WITH AI

The Role of Smartphones in the Adoption of AI at Scale: Giving Personal Meaning to the Concept of a Family of AI Agents

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Purpose

This paper for the life was prepared for the lifewide learning inquiry into Living and Learning with AI. It is intended to raise awareness of the way AI-technologies are being introduced through Smartphones, and adopted at scale into a world that is increasingly AI-mediated. This paper is intended to stimulate interest, thinking, dialogue, experimentation and reflection on experiences of using your own smartphone and AI-enabled apps within the Living and Learning with AI inquiry.

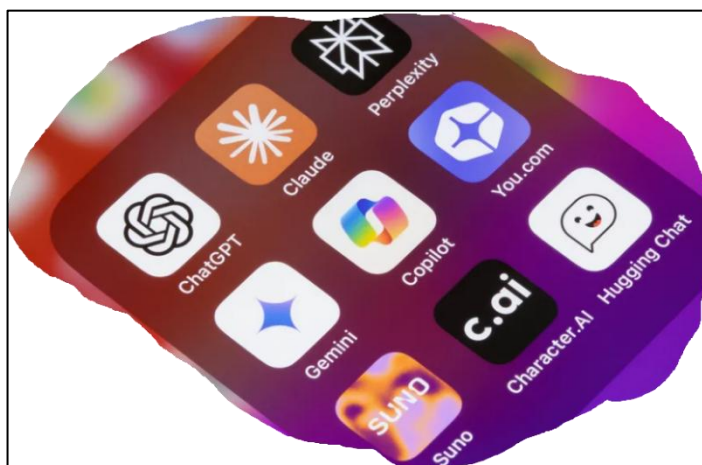
Introduction

In the short space of about 17 years, an entirely new way of being, has come about for a considerable portion of the global population. In Deweyan terms¹ the smart phone has had a profound impact on humanity's undergoing as we have used these technologies, together with the internet, to mediate the way we perceive and interact with the world. The smartphone has become the most widely distributed and routinely used personal technology in human history.

Carried in pockets and bags, frequently consulted throughout the day, and integrated into work, home and social life, it has become an indispensable companion in everyday living.

Increasingly, it is also the primary medium through which artificial intelligence is

encountered, used and understood. For many people, the smartphone is not simply a communication device but the gateway through which AI has quietly entered daily life at scale.



Methodology – role of AI

The development of this article formed part of an ongoing inquiry into living and learning within AI-mediated ecologies of practice². Generative AI (ChatGPT Plus) was engaged as a cognitive companion within this ecology to support articulation, structural development, and the testing of conceptual distinctions.

The article developed through structured dialogic engagement with the AI. The AI system assisted with articulation, structural refinement, conceptual clarification, and the testing of emerging formulations. Draft passages were iteratively discussed, refined, reorganised, and reworded through conversational exchange.

The direction of inquiry, selection of examples, theoretical framing, interpretive judgements, and final editorial decisions remained solely with the author. The AI system did not independently determine arguments, conduct autonomous research, or assume responsibility for interpretation. Rather, it functioned as a dialogic and articulative support within a human-authored ecology of practice.

Conceptual integration, evaluative judgement, and responsibility for the claims made in this article reside with the author.

Rapid Transition to an AI Mediated World

This inquiry begins from the observation that the global adoption of AI is not occurring primarily through dramatic encounters with advanced systems or specialised professional tools. Rather, it is unfolding through the gradual embedding of AI functions within familiar smartphone applications that support everyday activities: navigating journeys, managing health and wellbeing, organising tasks, interpreting the natural world, communicating with others, creating and expressing ideas, and seeking information or advice. Through these routine interactions, millions of people are already living with and through AI, often without consciously seeing their actions as engaging with artificial intelligence.

From this perspective, the smartphone can be understood as a key infrastructural device and resource in the global diffusion of AI. It introduces AI gently and incrementally, embedding it within practical activities that already matter to people. In doing so, it lowers barriers to adoption, normalises interaction with intelligent systems, encourages peer to peer learning about AI apps (most people have a smart phone), and enables individuals to incorporate AI into their own patterns of living and learning. The result is not a single relationship with a monolithic “AI assistant,” but a distributed and evolving ecology of specialised AI-enabled applications that together support, with potential to enhance, everyday functioning.

Within this evolving ecology, individuals do not passively receive AI technologies. They select, experiment with, adopt, ignore, or abandon particular applications according to their interests, values and circumstances. Over time, these selections coalesce into a personally meaningful collection: their own *family of AI agents or applications* that are drawn upon in both routine and occasional activities. Some members of this family become trusted and frequently consulted companions, woven into daily habits and practices; indeed, some apps are capable of creating entirely new habits and routines.

Others remain peripheral, called upon only when specific needs arise. New members may be welcomed as possibilities expand, while others fall into disuse as needs change. In this way, each person gradually assembles their distinctive family of AI tools that reflects their purposes, contexts and ways of living.

Framing everyday AI use in terms of a “family¹” emphasises a personally meaningful relationship, familiarity and evolving significance. It recognises that people come to know and trust certain applications through repeated interaction, and that these applications can come to play enduring roles in how they think, perceive, act and create. At the same time, the metaphor retains a clear sense of human authorship and responsibility: it is the individual who selects, maintains and interprets this family of tools, weaving them into their own ecology of practice. AI does not determine the pattern of living; rather, it becomes one set of resources through which that pattern is shaped and reshaped.

This inquiry therefore explores two closely related themes. First, it considers the role of smartphones in introducing and promoting AI use at unprecedented scale, examining how AI functions embedded in everyday applications are reshaping common practices across domains such as learning, health, creativity, navigation and communication. Second, it investigates how individuals construct personal meaning from these developments by assembling and engaging with their own family of AI agents. Through this dual focus, the inquiry seeks to understand not only the technological diffusion of AI, but also the lived, experiential and developmental significance of AI as it becomes woven into the fabric of everyday life.

The intention is not to arrive at definitive conclusions about the future of AI, but to explore how AI is already being lived with in the present: how it is encountered, interpreted, selected and integrated into the practical and meaningful activities of daily life. By mapping the emerging ecology of AI-enabled smartphone use and examining the evolving idea of a personal family of AI agents, this inquiry aims to contribute to a deeper understanding of how humans and AI are beginning to coexist within the ordinary contexts of contemporary living.

Enhanced awareness of the AI ecosystem also provides a platform for conducting personal mapping of AI use through smart phones and for conducting experiments into expanding AI app use. Table 1 provides some illustrative examples of AI-based smartphone apps available in February 2026.

Table 1 Common AI-based smartphone apps for everyday living (early February 2026)

AI-based App	Main role in everyday life	How AI is used	Types of information it provides
ChatGPT	General thinking partner, writing, learning, planning	Conversational AI generates ideas, explanations, drafts, and structured advice	Explanations, plans, emails, summaries, creative writing, problem-solving suggestions
Google Gemini	Integrated AI assistant across Google apps	Multimodal AI (text, image, voice) connected to search, Gmail, Docs	Search-based answers, document summaries, email drafts, travel info, task help
Microsoft Copilot	Productivity and knowledge support	AI integrated with web search and Microsoft tools	Research summaries, document drafting, data interpretation, coding help
Perplexity AI	AI search and research assistant	Uses AI to search web and synthesise answers with sources	Evidence-based answers, links to sources, summaries of topics, comparisons
Grammarly	Writing improvement	AI checks grammar, tone, clarity and intent	Writing corrections, tone suggestions, clarity improvements, re-phrasing
Notion AI	Personal organisation and knowledge management	AI embedded in notes/tasks database	Summaries of notes, task planning, idea generation, document drafting
Otter.ai	Meeting and conversation capture	Speech-to-text AI + summarisation	Transcripts, meeting summaries, action points, searchable conversations
Google Photos	Photo organisation and memory support	Image recognition and generative AI editing	Automatic tagging (people, places), search by content, photo enhancement
Apple Photos / Apple Intelligence	Personal photo and content intelligence	On-device AI for search, editing, suggestions	Smart search (“photos of birds”), image clean-up, memory creation
MyFitnessPal (AI features)	Health tracking and lifestyle support	AI food recognition and habit analysis	Calorie estimates, nutrition info, health trends, behaviour insights
Fitbit / Apple Health AI features	Personal health and wellbeing	AI interprets sensor data	Sleep analysis, activity trends, heart rate insights, wellbeing recommendations
Google Maps	Navigation and daily mobility	AI predicts traffic, optimises routes, suggests places	Routes, travel times, live traffic, recommended places, reviews
Spotify AI DJ	Personalised entertainment	AI analyses listening habits and generates playlists	Music recommendations, personalised playlists, listening trends
Duolingo Max	Language learning companion	Generative AI for conversation practice and explanations	Language exercises, conversational simulations, grammar explanations
Replika	Conversational companion / reflection	AI chatbot designed for emotional conversation	Reflective dialogue, journaling prompts, conversational companionship
Canva AI tools	Everyday design and communication	AI image generation, layout and text assistance	Social media graphics, posters, presentations, image editing
Amazon Alexa / Google Assistant	Voice-based daily assistant	Conversational AI + automation	Reminders, weather, shopping lists, smart home control, general questions

Current Scope of Smart Phone AI-based apps (early 2026)

Table 2 Provides a working synthesis of common AI applications that can be found on smart phones, that are being used on a daily or episodic basis. It is illustrative rather than definitive. It is constantly evolving as new AI-based apps are developed and introduced. This table effectively maps the more important concerns and interests of people as they go about their everyday life.

Table 2 Summary of common AI applications and their roles that can be found on smart phones in February 2026.

Domain	Human capability extended	Role of AI	Typical information provided	Example apps
Thinking & learning	Understanding, reasoning, judgement	Explanation, synthesis, planning	Answers, summaries, structured thinking	ChatGPT, Gemini, Perplexity
Health, fitness & wellbeing	Self-awareness and regulation	Behaviour tracking, pattern detection	Sleep, activity, diet, mood insights	Fitbit, Apple Health, Calm
Organisation & productivity	Managing tasks and commitments	Scheduling, writing, summarising	Notes, reminders, documents, action lists	Notion AI, Grammarly, Otter
Navigation & mobility	Movement through world	Route optimisation, prediction	Maps, travel time, traffic, places	Google Maps, Waze
Environmental perception	Interpreting living and physical world	Image & sound recognition	Species ID, landscape, objects	iNaturalist, Seek, Merlin, Google Lens
Planetary & spatial awareness	Understanding Earth at scale	Satellite and geospatial modelling	Terrain, land use, historical imagery	Google Earth
Creativity & expression	Imagination, making, communicating meaning	Generative media, design, writing, music	Images, text, video, layouts, ideas	Canva AI, generative image apps, music tools
Entertainment & leisure	Relaxation and enjoyment	Recommendation, personalisation	Music, video, games, reading suggestions	Spotify, YouTube AI feeds, streaming apps
Social & communication	Interaction and connection	Translation, summarising, smart reply	Messages, transcripts, meeting notes	WhatsApp AI tools, email AI
Home & everyday assistance	Managing domestic life	Voice interaction, automation	Reminders, shopping lists, smart home control	Alexa, Siri, Google Assistant

Table 2 does more than provide a descriptive inventory of AI-enabled smartphone applications. It reveals how artificial intelligence is becoming interwoven with the core concerns and practical activities of everyday life. Each domain represented in the table corresponds not simply to a category of apps, but to a sphere of human capability and

concern: thinking and learning, health and wellbeing, organisation, mobility, perception of the environment, creativity, communication, and the management of domestic life. Taken together, these domains offer a window into the ways in which AI is being quietly integrated into the ordinary processes of living, while extending the potential for learning something of value to the individual.

One of the most significant points illustrated by the table is that AI is not entering everyday life through a single dominant interface, but through a multiplicity of specialised applications, each embedded within familiar practices. More explicitly, and conceptually, they are being selected to include and use within a human authored ecology of practice.²

Navigation apps support movement through space; health apps support awareness of bodily states and habits; species identification apps deepen perception of the living world; generative creative tools support expression and communication. In each case, AI is encountered not as an abstract technological system but as a practical resource that helps people accomplish something that matters to them. The diffusion of AI is therefore occurring through functional integration rather than technological spectacle

The table also illustrates how smartphone-based AI extends a range of fundamental human capabilities. These include cognitive capabilities such as reasoning, planning and interpretation; perceptual capabilities such as recognising species, places and patterns; regulatory capabilities such as monitoring health and behaviour; creative capabilities related to expression and design; and practical capabilities associated with organisation and navigation.

Seen in this way, the contemporary smartphone can be understood as a portable assemblage of AI-enabled extensions to human capability. It enables individuals to draw selectively on a wide repertoire of supports as they move through different situations and contexts in daily life. More than this, it enables individuals to interact with multiple contexts simultaneously.

For example, while walking through a landscape a person may be moving physically through space while also monitoring distance travelled and time taken, tracking steps, heart rate or other bodily indicators, photographing and identifying plants and animals encountered along the way, and communicating with others at a distance. Through their smartphone they may also be accessing maps, recording observations, or listening to information relevant to their surroundings. In such moments, physical presence in one setting is accompanied by cognitive, social and informational engagement with several others.

Through this layering of capabilities, a person's family of AI-based applications enhances their capacity to interact effectively with their immediate context while also engaging with additional contexts that extend beyond the here and now. The

smartphone thus becomes a mediating hub through which different domains of experience — physical, digital, social, ecological and reflective — can be brought into simultaneous relationship. This capacity to support multi-contextual engagement represents one of the distinctive contributions of AI-enabled smartphones to contemporary ways of living and learning.

Another important feature highlighted by the table is the coexistence of continuous and episodic relationships with AI. Some applications — such as health trackers, messaging tools, maps or voice assistants — operate continuously in the background of everyday routines, shaping habits and expectations over time. Others are consulted episodically when particular needs arise: to identify a plant, generate a design, plan a journey, or explore a question. Together, these patterns of use contribute to the formation of a personalised ecology of AI engagement in which certain applications become central and habitual, while others remain peripheral yet available. This differentiation plays a significant role in the gradual formation of an individual's "family" of AI agents.

The table further suggests that the evolving ecology of smartphone AI reflects and reinforces what people value and attend to in their lives. The presence of domains such as health and wellbeing, creativity and expression, environmental perception, and social communication indicates that AI is not confined to productivity or efficiency-oriented tasks. It is increasingly implicated in how people care for themselves, relate to others, understand the natural world, and express identity and meaning. As such, the ecology of smartphone AI can be read as a mirror of contemporary human concerns and aspirations, as well as a set of tools that may reshape them in their day to day becoming.

Importantly, the table is intended as a working synthesis rather than a fixed taxonomy. The global ecosystem of AI-enabled applications is evolving rapidly as new tools are introduced, existing tools are enhanced, and patterns of use shift. Individuals continuously experiment with new possibilities, incorporating some into their routines while discarding others. Over time, this process of exploration and selection contributes to the gradual construction of a personally meaningful family of AI applications. The composition of this family is shaped by context, interest, opportunity, experience and exposure, and is likely to change as a person's life circumstances and projects evolve.

By making visible the current scope of AI-enabled smartphone applications and the domains of life they touch, Table 1 provides a foundation for further inquiry. It enables reflection on how individuals assemble and engage with their own collection or family of AI tools, how these tools influence perception and action, and how the broader ecology of everyday AI use may continue to develop. In this sense, the table functions not only as a descriptive overview but also as an invitation: to notice, to map, and to experiment with the evolving family of AI agents that accompanies contemporary life.

Developing the family metaphor to a personal collection and relationship with AI-apps

One of the reasons the family metaphor is so generative is that it captures not only diversity of roles, but also the idea of reliable support. When a family functions well, it forms a network of care, competence and responsiveness that is available when needed. Its members do not all perform the same function, nor are they all present at the same time, but collectively they provide a sense of reassurance and practical assistance. In a similar way, a well-established family of AI-based smartphone applications can provide a distributed network of cognitive, perceptual and practical support that individuals can draw upon as circumstances require.

Just as people rely on different family members for different kinds of support — advice, practical help, companionship, reassurance, or specialised knowledge — individuals come to rely on particular AI applications for particular forms of assistance. Some are consulted frequently and become woven into daily routines; others remain in the background, available when a specific need arises. The strength of the family lies not in any single member but in the reliability and complementarity of the whole. Knowing that this network of support is readily accessible can itself enhance confidence and agency, enabling people to undertake tasks, explore new interests, or navigate unfamiliar situations with a greater sense of capability.

The metaphor also conveys continuity and presence. A supportive family is “there when you need it,” even if not always actively engaged. Similarly, many AI-enabled applications remain quietly available on a smartphone, ready to be called upon in moments of uncertainty, curiosity or need. Their presence can encourage experimentation and exploration: a person may attempt something new — identifying an unfamiliar species, designing a visual artefact, navigating an unfamiliar place, monitoring a health indicator — partly because they know that assistance is readily to hand if required. In this way, the family of AI apps functions as a latent support structure that expands the range of what a person feels able to do.

At the same time, the family metaphor highlights the importance of familiarity and trust. Relationships within families deepen through repeated interaction and demonstrated reliability; similarly, trust in particular applications develops through experience of their usefulness, accuracy and responsiveness. Applications that consistently prove helpful may become central members of a person’s AI family, while those that disappoint or no longer serve a purpose may gradually be set aside. Over time, this process of selection, evaluation and habituation contributes to the formation of a stable yet evolving network of trusted supports.

The metaphor also reminds us that families are dynamic rather than static. They grow, contract and change as circumstances shift. New members may be welcomed; others

may become less central; roles may evolve. In an analogous way, the composition of a person's AI family changes as new applications are encountered, as needs and interests develop, and as technological possibilities expand. What remains constant is the active role of the individual in curating and maintaining this network of support, ensuring that it continues to serve their purposes and values.

Seen in this way, the “family of AI agents” is not simply a collection of tools but a personally assembled and continually evolving support system. It provides a distributed infrastructure of assistance that can be drawn upon across multiple domains of living — cognitive, practical, creative, social and ecological. The metaphor foregrounds the relational and functional qualities of this assemblage: its diversity of roles, its reliability, its capacity to evolve, and its potential to enhance confidence and capability in everyday life.

Role of Smartphone AI-Apps in Developing Competence

We might also consider the use of smartphone AI-based applications through the lens of developing competence to live a certain sort of life, where competence can be understood as *“an organism's capacity to interact effectively with its environment.”* It is inescapable that we are, like all living things, ecological beings living in an ecological world, and that living and learning are inseparable and ecological in nature. The ways in which smartphone AI apps are now being used therefore raise important questions about how they are influencing our competence to interact effectively with our environments — physical, social, informational and digital.

From this perspective, AI-enabled smartphone applications can be viewed as resources that potentially extend or mediate human competence. They provide access to information, interpretation, feedback and guidance that can enhance an individual's capacity to perceive, understand and act within particular situations. Navigation applications support spatial competence by helping individuals orient themselves and move through unfamiliar places. Health and wellbeing apps enhance awareness of bodily states and behavioural patterns, contributing to self-regulatory competence. Environmental perception tools such as plant and bird identification apps deepen ecological awareness by enabling people to recognise and interpret aspects of the living world that might otherwise remain unnoticed. Generative and organisational tools support cognitive and creative competence by assisting with planning, communication and expression.

Seen in this way, a person's family of AI-based smartphone applications may function as a distributed support system for the development and enactment of competence across multiple domains of living. By making specialised knowledge and interpretive capabilities readily available, these applications can expand what individuals feel able to attempt and accomplish. They can encourage exploration and experimentation by

providing reassurance that guidance and feedback are close at hand. Over time, repeated interaction with such tools may contribute to the formation of new habits of attention, new forms of awareness and new capacities for action.

At the same time, viewing smartphone AI through the lens of competence invites careful consideration of the nature of this enhancement. Does reliance on AI-enabled guidance deepen an individual's own capability to perceive and act effectively, or does it risk displacing or diminishing certain forms of embodied or experiential knowledge? Does it foster greater sensitivity to the complexities of the environment, or encourage more mediated and instrumental modes of engagement? In practice, the effects are likely to be varied and context-dependent. In some situations, AI applications may scaffold learning and strengthen competence by supporting reflection and informed action. In others, they may substitute for capabilities that might otherwise have developed through direct experience.

The ecological framing of competence highlights that effectiveness in living is not simply a matter of individual skill but of the relationships between an organism and its environment. Smartphone AI applications are now part of that environment. They form a layer of informational and interpretive infrastructure through which many people encounter and make sense of the world. As such, they participate in shaping the conditions under which competence is developed and exercised. To understand their significance, it is therefore necessary to explore not only what these applications enable people to do, but how they influence the ongoing processes through which people learn to live well within the complex, multi-layered environments of contemporary life.

This inquiry will explore how the growing family of AI-enabled smartphone applications contributes to the development, extension and sometimes reconfiguration of human competence. It will consider how these tools support individuals in interacting effectively with their environments, how they may reshape perceptions of what it means to be competent, and how they can be used in ways that strengthen rather than diminish the ecological capacities required for thoughtful, responsible and creative living in an AI-mediated world.

AI-Enabled Smartphones and their Potential Contribution to the Development of Human Competence

AI-enabled smartphones can be understood as part of an emerging socio-technical infrastructure that has the potential to influence the development and expression of human competence in everyday life. If competence is understood, following White, as "*an organism's capacity to interact effectively with its environment,*" then the growing

presence of AI within the environments people inhabit inevitably shapes the conditions under which such competence is formed and enacted.

However, competence cannot be meaningfully considered in abstraction from the ecological contexts within which it is exercised. It is always relational and situated. Individuals do not simply possess competence; rather, they develop and enact competence through participation in particular situations, practices and environments. For this reason, the influence of AI-enabled smartphones on human competence can only be understood within the framework of *human-authored ecologies of practice*³ — the dynamic assemblages of purposes, relationships, resources, tools and contexts within which people live and learn.

From this ecological perspective, smartphone AI applications are not external add-ons to human capability but elements within the environments through which competence is developed and enacted. As individuals engage in everyday activities — navigating landscapes, managing health, communicating with others, creating artefacts, interpreting the natural world — they selectively incorporate AI-enabled tools into their practices. Through this process, they construct and continually adapt an ecology of supports that mediates how they perceive and interpret situations, make decisions and take action.

Within such ecologies, competence emerges through interaction. A person walking through a landscape while using mapping tools, health trackers and species identification apps is not merely assisted by technology; they are participating in an expanded field of perception and feedback through which new forms of awareness and capability may develop. Their competence lies not solely in what they can do unaided, nor solely in what the technology can do, but in the evolving relationship between the individual, their environment and the purposes and resources they have chosen to integrate into their unfolding ecology of practice.

The idea of a personally assembled *family of AI applications* becomes significant in this context. This family constitutes a distributed network of cognitive, perceptual and practical supports that can enhance an individual's capacity to engage effectively with different aspects of their environment. Some applications support continuous awareness and regulation — monitoring health, location or communication. Others provide episodic support for interpretation, creativity or problem-solving. Together, they form a responsive infrastructure through which individuals can extend and enact their competence across multiple domains of living.

Yet the development of competence within AI-mediated ecologies is not automatic. It depends on how individuals select, interpret and use these tools within the contexts of

their own purposes and values. An ecology of practice in which AI tools are used reflectively and experimentally may foster learning, curiosity and enhanced capability. In contrast, unreflective reliance on automated guidance may, in some circumstances, limit the development of certain forms of judgement or embodied understanding. Competence therefore resides not simply in access to AI-enabled resources, but in the ways in which they are integrated into meaningful patterns of action and learning.

Understanding the relationship between AI-enabled smartphones and human competence thus requires attention to three interrelated dimensions:

1. **The capabilities afforded by AI tools** — the informational, interpretive and generative and curatorial resources they provide.
2. **The ecologies of practice within which they are used** — the contexts, purposes, affordances, places, spaces, relationships and activities that give them meaning.
3. **The agency of the individual** — the ways in which people experience, curate, adapt and learn through their evolving family of AI applications.

Seen in this way, the growing presence of AI in smartphones represents not simply a technological shift but an ecological transformation in the conditions under which competence to interact effectively with their environment, is developed and exercised. Individuals now have the capacity to assemble personalised constellations of intelligent tools that can accompany them across multiple contexts of living. A family of AI applications, can extend perception, support decision-making, scaffold learning and enhance creative expression. At the same time, they invite new forms of responsibility: to use such resources thoughtfully, to remain attentive to the qualities of direct experience, and to continue developing the capacities required for effective, ethical and meaningful interaction with an increasingly AI-mediated world.

This inquiry therefore explores how human-authored ecologies of practice that incorporate families of AI-enabled smartphone applications may contribute to the development of human competence in an AI-mediated world. It asks not only what these technologies enable people to do, but how they participate in shaping the ongoing processes through which people learn to live, act and become within the complex environments of contemporary life.

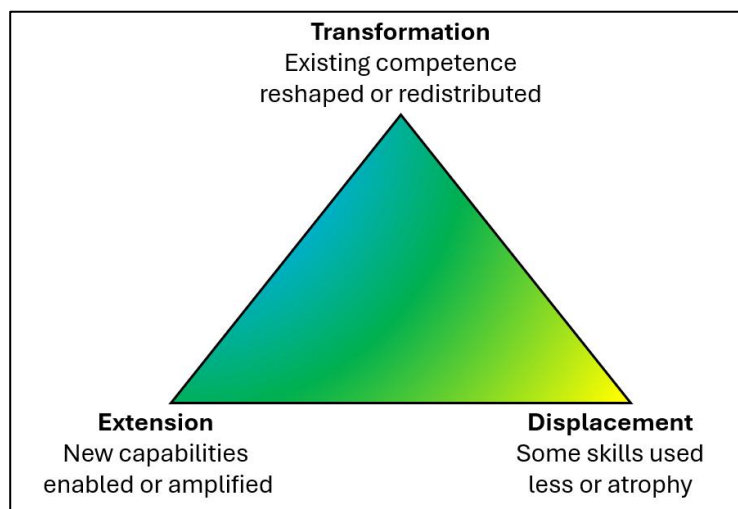
Implications for evolving human competence

If AI-enabled smartphones are contributing to the development of new forms of human competence, it is also necessary to consider how they may be reshaping, and in some cases displacing, existing forms of competence. Throughout history, technological innovations that extend human capability have often altered the balance of skills required for effective interaction with the environment. The emergence of AI-mediated support systems delivered through smartphones is no exception.

Competence, understood as the capacity to interact effectively with one’s environment, is always situated within particular ecological conditions. When those conditions change — for example, through the introduction of navigational systems that provide real-time location and guidance — the forms of competence required for effective functioning also change. Skills that were once essential may become less frequently exercised, while new forms of competence emerge in their place. Navigation provides a clear illustration. Before the widespread availability of GPS-enabled smartphones, effective navigation depended on the ability to read maps, interpret spatial relationships, maintain orientation and make route decisions based on environmental cues. These skills required sustained attention to landscape, memory and spatial reasoning. With the advent of AI-assisted navigation systems that continuously display location and provide step-by-step directions, many of these skills are no longer routinely required. The competence to interpret and navigate space has not disappeared, but it has been reconfigured. It now includes the ability to use, interpret and, when necessary, critically evaluate navigational technologies.

This example highlights a broader pattern. As AI-enabled applications become integrated into everyday practices, certain forms of embodied, experiential or memory-based competence may be exercised less frequently. At the same time, new forms of competence emerge: the capacity to select appropriate tools, interpret algorithmic guidance, maintain situational awareness while using mediated information, and remain capable of acting effectively when technological support is absent or unreliable. Competence thus shifts from being located solely within the individual to being distributed across the relationship between the individual, their tools and their environment.

Figure 1 Representation of the skills dynamic afforded by AI-enabled smartphones



The displacement of certain skills does not necessarily imply a simple loss. In some cases, it may represent a redistribution of cognitive and perceptual effort that enables

individuals to attend to other aspects of experience. For example, a person using navigational assistance may be freed from the constant need to determine direction and can instead focus attention on features of the landscape, social interaction, or reflective thought. However, such redistribution also carries risks. Reduced engagement with certain forms of direct perception or reasoning may, over time, diminish confidence or capability in situations where technological support is unavailable.

For this reason, the development of competence within AI-mediated ecologies of practice requires thoughtful integration rather than passive reliance. Individuals who remain aware of the mediating role of AI, and who periodically engage directly with the skills that technologies support or replace, may be better positioned to sustain a balanced repertoire of capabilities. Within a human-authored ecology of practice, AI applications can be used not only as substitutes for existing skills but also as scaffolds that support the development of deeper understanding and more flexible forms of competence.

The question is therefore not whether AI-enabled smartphones simply enhance or diminish human competence, but how they participate in its ongoing transformation. As people assemble and engage with their evolving family of AI applications, they are not only extending their capabilities but also reshaping the patterns of skill, awareness and judgement through which they interact with the world. Understanding this dynamic — the interplay between extension, transformation and displacement — is essential if we are to appreciate how human competence is being reconfigured within the emerging ecologies of AI-mediated life. This is another question that could be addressed in our lifewide learning inquiry into living and learning with AI.

Provocation: Living and Learning with a Family of AI Agents

This exploratory paper has been offered as a background resource for our lifewide inquiry into living and learning with AI. It suggests that for many people the smartphone has become the primary gateway through which artificial intelligence is entering everyday life at scale, and that through the selective adoption of AI-enabled applications individuals are gradually assembling their own personally meaningful “family” of AI agents. This evolving family forms part of a human-authored ecology of practice through which people think, act, create, relate and learn.

If competence can be understood as the capacity to interact effectively with one’s environment, then the growing presence of AI-enabled applications in our daily lives invites us to consider how these tools are influencing what it means to live competently in an increasingly AI-mediated world. They may extend our capacities to perceive, interpret and act, while also reshaping or displacing existing forms of skill and

understanding. They may enable us to engage simultaneously with multiple contexts — physical, social, informational and reflective — in ways that were previously impossible. They may also encourage new habits, dependencies, interdependencies and possibilities for learning and becoming.

This inquiry therefore invites participants to become more consciously aware of the family of AI applications that already accompanies them through daily life, and to explore how this evolving ecology of support is influencing their own competence, learning and sense of agency. By noticing, reflecting and experimenting, we may begin to understand more clearly how we are living and learning with AI, and how we might do so more thoughtfully and creatively.

Questions for personal reflection and dialogue

Participants in the inquiry might begin by considering their own current use of AI-enabled smartphone applications:

- Which AI-enabled apps do you currently use on your smartphone, regularly or occasionally?
- Which of these have become trusted and frequently used members of your own “family” of AI tools?
- In what ways do these applications enhance your ability to think, act, create, navigate, communicate or care for yourself and others?
- Are there ways in which your reliance on certain apps may be reducing your use of other skills or forms of awareness?
- How does your use of AI-enabled apps influence your capacity to interact effectively with the environments you inhabit — physical, social, professional or ecological?
- In what ways does your smartphone enable you to interact with multiple contexts simultaneously? How does this shape your experience of living and learning?

Invitations to experiment

Participants might also wish to extend their inquiry through small-scale experiments:

- Explore one or two free AI-enabled apps that you have not previously used. What new possibilities or forms of support do they offer?
- Experiment with using AI in a domain of life where you have not previously done so — for example, creativity, reflection, ecological awareness, language learning or personal organisation.
- Notice how introducing a new AI application into your routine influences your habits, attention and sense of competence.

- Try periodically undertaking an activity without AI support (for example navigating, writing or observing) and then with AI support. What differences do you notice?
- Reflect on how your personal “family” of AI applications is evolving over time. Which members are becoming central? Which remain peripheral? Which might you wish to welcome or retire?

Through such reflection and experimentation, we are likely to develop a richer understanding of how AI-enabled smartphones are participating in the ongoing formation of our competence and our ways of living. The intention of this lifewide inquiry is not simply to document the spread of AI tools, but to explore how we might live, learn and act wisely and creatively within the emerging ecologies of AI-mediated life.

Background Sources

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3 Jackson N.J. with ChatGPT Plus (2026) *AI-Mediated, Ecologies of Practice: Implications for Lifelong Learning & Higher Education*

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