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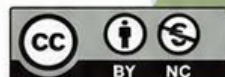


SMART AGE CURRICULUM

Media Literacy and Digital Resilience for Older Adults



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Title	SMART AGE CURRICULUM
Summary	The SMART AGE Curriculum presents a structured 10-module learning pathway designed to strengthen media literacy, digital resilience and autonomous online participation among older adults. Grounded in DigComp 3.0 and UNESCO Media and Information Literacy principles, it addresses information evaluation, disinformation, AI-generated content, algorithms, online safety, privacy, digital well-being, responsible communication, civic participation and reflective digital autonomy. The curriculum also provides the educational foundation for the SMART AGE MOOC and its micro-credential-based learning pathway.
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Part A

1. Introduction

The Erasmus+ **SMART AGE project**, *Seniors' Media Awareness & Resilience in the Digital Age*, responds to the growing need to support older adults in navigating digital and media environments with greater confidence, safety and critical awareness. Digital services, online information, social media, public communication, scams, personalised content and AI-generated media increasingly affect everyday independence, access to services, communication with others and participation in society. For older adults, these changes create opportunities for autonomy and inclusion, but also risks linked to misinformation, manipulation, fraud, privacy, digital stress and loss of confidence.

The SMART AGE curriculum defines a structured micro-credential learning pathway for older adults, especially learners aged 60 and above. It focuses on media literacy, digital resilience and autonomous participation in digital life. The curriculum is designed for learners who may face barriers linked to rural location, limited access to organised digital education, lower digital confidence or lack of regular support. At the same time, it does not treat older adults as passive or deficient learners. It builds on their life experience, practical judgement, knowledge of their communities and ability to compare new situations with previous experience.

SMART AGE does not replace basic courses on using computers, smartphones or the internet. It assumes that learners already have basic independent access to an internet-connected device and can carry out simple online actions, such as opening a website, reading a message or using a familiar digital service. The curriculum builds on this starting point and focuses on the competences needed to understand, evaluate and respond to everyday digital and media situations. These are not only technical problems. They require interpretation, judgement and safer decision-making.

The core SMART AGE curriculum consists of ten modules with a total indicative workload of 75 hours, equivalent to approximately 3 ECTS where applicable. The official SMART AGE micro-credential is awarded only after completion of the full ten-module learning pathway and all defined assessment requirements. Individual modules include a module badge to show progress within the pathway, but module badges do not constitute separate SMART AGE micro-credentials.

The curriculum uses [DigComp 3.0](#) as its main European competence reference framework and is enriched by Media and Information Literacy principles. DigComp 3.0 provides a recognised structure for digital competence, while [UNESCO's Media and Information Literacy](#) adds a critical, civic and interpretative perspective. In SMART AGE, these frameworks are adapted to the everyday digital situations, learning needs and strengths of older adults.

Note: Although the original project application referred to DigComp 2.2, the curriculum uses DigComp 3.0 because it is the updated European Digital Competence Framework and offers stronger coverage of AI, misinformation, cybersecurity, digital rights, responsibility and digital well-being. This update does not change the project's intended direction; it strengthens alignment with current European competence standards.

The curriculum provides the educational foundation for the official SMART AGE MOOC. The MOOC will translate this curriculum into an accessible, asynchronous and self-paced online learning environment. The curriculum is also intended as a transferable Open Educational Resource for adult education organisations, libraries, older adult associations, NGOs, community centres and other stakeholders, provided that adapted uses clearly acknowledge SMART AGE and do not present themselves as the official SMART AGE MOOC or micro-credential unless authorised.

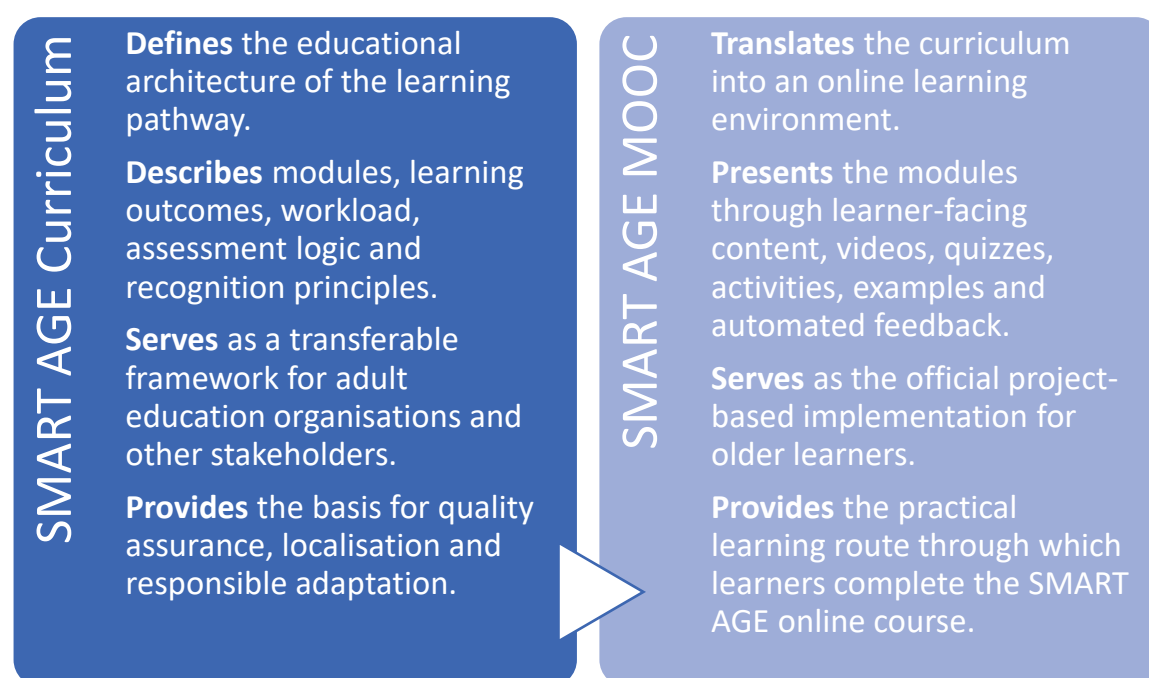
The purpose of the curriculum is therefore both practical and strategic. It gives the SMART AGE consortium a coherent basis for MOOC development, assessment, localisation and recognition. It also

offers the wider adult education field a reusable framework for strengthening media literacy and digital resilience among older adults. Its broader aim is to support older learners in participating in digital life more safely, critically, confidently and independently.

2. Curriculum and MOOC relationship

The SMART AGE curriculum is developed as the educational foundation for the SMART AGE MOOC. The MOOC will not be designed as a separate or parallel learning product, but as the digital implementation of this curriculum. This means that the curriculum defines the educational structure, while the MOOC will translate that structure into an accessible online learning experience for older learners.

The curriculum and the MOOC are closely connected, but they have different functions. The curriculum answers the educational questions: what learners learn, why it matters, how learning is structured, which learning outcomes are achieved, what workload is expected and what evidence of learning is required. The MOOC will answer the implementation question: how will older learners experience this pathway in a virtual, asynchronous and self-paced online environment?



For this reason, the curriculum is written as a **structured but transferable framework**. It guides the design and creation of the SMART AGE MOOC, but it is not limited to one technical platform, one interface design or one fixed set of learner-facing materials. The curriculum may also support other adult education organisations, libraries, older adult associations, NGOs, community centres or local initiatives that wish to design their own learning activities for older adults.

This transferability is important because the digital challenges addressed by SMART AGE are not limited to one country or one institutional context. Older learners across different communities may need support in evaluating online information, recognising manipulation, understanding AI-generated content, responding to scams, protecting personal data, managing digital stress and participating responsibly online. The **curriculum therefore offers a common educational structure that can be adapted to different languages, media examples, national contexts and delivery formats**.

At the same time, reuse and adaptation require clarity. Using the SMART AGE curriculum as a source does not automatically make another course, workshop, certificate, badge or online programme a SMART AGE product. The SMART AGE MOOC will be the official project implementation developed within the project consortium and connected to its defined completion requirements, quality assurance procedures and recognition logic.

Other organisations may use the curriculum to develop their own learning activities and may issue their own certificates, attendance confirmations, local badges or other forms of recognition. However, these adaptations must clearly state the issuing organisation, scope, workload, learning outcomes, assessment method and form of participation. They must also clearly acknowledge that the activity is based on or adapted from the SMART AGE curriculum, while avoiding any implication that it is the SMART AGE MOOC or SMART AGE micro-credential unless such authorisation has been granted.

This distinction protects both transferability and credibility. It allows the curriculum to function as an Open Educational Resource that can be reused and adapted, while preserving the integrity of the SMART AGE learning pathway. It also supports transparency for learners, institutions and stakeholders who need to understand what has been learned, how learning was assessed and which organisation is responsible for issuing recognition.

3. Target group and educational rationale

The **SMART AGE curriculum is designed primarily for older adults**, especially learners aged 60 and above. This target group is diverse. Some older adults use smartphones, messaging apps, social media, online banking or public service websites regularly. Others use digital tools only when necessary, depend on family members for support, or avoid some digital services because they find them confusing, stressful or unsafe. The curriculum therefore does not assume one common starting point or one single profile of an older learner. The curriculum is intended for older adults who already have basic independent access to internet-connected devices. A person may be able to use a device and still feel uncertain when judging whether a message is safe, whether a source is reliable, whether a post is manipulative, or whether an image, video or text may have been generated or altered by artificial intelligence.

In SMART AGE, **media literacy** means the ability to understand how information and media messages are created, framed, distributed and interpreted in digital environments. It includes recognising different types of content, assessing source credibility, identifying persuasive or manipulative strategies, comparing information and making responsible decisions about sharing, reacting to or ignoring content. Media literacy is therefore not limited to reading news or recognising false information. It also includes understanding how digital platforms, formats, emotions, images, headlines, comments, algorithms and social relationships shape interpretation.

Digital resilience means the ability to participate in digital life with greater safety, confidence, critical judgement and autonomy. It includes recognising uncertainty and risk, protecting personal data and well-being, responding carefully to scams, misinformation and AI-generated content, asking for help when needed and adapting learned routines to new digital situations. In this sense, digital resilience is not a single technical skill. It is a practical combination of knowledge, skills and attitudes that supports safer and more responsible participation in digital society.

The educational rationale of SMART AGE rejects a deficit-only model of older learners. Many older adults already bring important strengths into learning: life experience, practical judgement, knowledge of their communities, memory of previous media systems, and the ability to compare new situations with earlier social, political and technological changes. These strengths are important resources for media literacy and digital resilience. The curriculum therefore aims to activate learners' experience rather than treat it as outdated.

At the same time, older adults may face specific barriers in digital life. Some are practical, such as limited access to organised training, unfamiliar terminology, changing interfaces, small screens, lower digital confidence or lack of patient support. Others are social and emotional, such as fear of making mistakes, embarrassment when asking for help, distrust of digital services, previous negative experiences or dependence on others for digital tasks. These barriers can reduce autonomy even when a person has basic access to digital tools.

These challenges may be stronger in rural, remote or underserved communities, where structured digital education and regular support may be less available. As more public services, health information, financial transactions, communication channels and civic information move online, limited digital confidence can increase dependency and exclusion. For this reason, **SMART AGE treats media literacy and digital resilience as part of social inclusion**, not only as individual technical improvement.

The need for this curriculum is also connected to changes in the digital environment itself. Digital life is no longer limited to using a device or finding a website. Older adults encounter online news, social media posts, forwarded messages, digital advertising, online forms, scam attempts, personalised recommendations, AI-generated content and automated communication. SMART AGE therefore **focuses on practical situations** that older adults may recognise: checking a suspicious message, comparing health information, recognising emotional manipulation, identifying a possible scam,

deciding whether to share a post, protecting personal data, managing digital stress or participating responsibly in online discussions. These examples are not treated as isolated cases, but as learning situations through which learners practise transferable routines. The aim is not to make learners suspicious of all digital content or dependent on fixed instructions that may quickly become outdated. Instead, the curriculum supports habits of careful digital judgement: pausing before reacting, checking the source, comparing information, recognising pressure, protecting personal data, asking for help when needed and making informed decisions. These routines are repeated across modules so that learners can apply them in different digital contexts.

The educational rationale of SMART AGE is therefore practical, inclusive and autonomy-oriented. The curriculum supports older adults in using their experience as a strength, while giving them structured support for the digital challenges they face today. It aims to reduce digital exclusion, strengthen confidence, improve critical understanding and support active participation in everyday digital life.

4. Competence framework and SMART AGE learning outcome clusters

The SMART AGE curriculum is based on recognised European and international competence frameworks. These frameworks help define what learners are expected to know, understand and be able to do. They also make the curriculum easier to explain, compare, transfer and adapt in different adult education contexts. The main reference framework for SMART AGE is DigComp 3.0, the European Digital Competence Framework. DigComp 3.0 describes **digital competence** as a combination of knowledge, skills and attitudes needed for daily life, participation in society, learning and work. This is important because older learners require competences that remain useful even when digital technologies change. In this curriculum, DigComp 3.0 is used as a reference framework, not as a ready-made course structure. It helps identify important areas of digital competence, but SMART AGE organises these areas into a learning pathway adapted to older adults and their everyday digital situations. This adaptation is necessary because older adults usually experience digital challenges as combined real-life situations rather than as separate technical tasks. A suspicious message, for example, may involve source credibility, emotional pressure, possible fraud, privacy risk, personal data protection and the need to decide whether to click, reply, share, ignore or ask for help.

A second foundation is Media and Information Literacy. This perspective is needed because many digital challenges are not only technical. Learners do not only need to know how to use digital tools. They also need to understand how information and media messages are created, framed, distributed, promoted, interpreted and shared. Media and Information Literacy brings together information literacy, media literacy and digital literacy.

Information literacy	Supports finding, accessing, comparing, assessing and using information responsibly. In SMART AGE, this is connected with checking sources, identifying evidence, recognising uncertainty and making informed decisions.
Media literacy	Supports understanding media messages, formats, audiences, purposes, framing and influence. In SMART AGE, this is connected with recognising headlines, narratives, emotional framing, manipulation and the social consequences of media messages.
Digital literacy	Supports the use of digital technologies and awareness of digital identity, rights, safety, privacy, communication and well-being. In SMART AGE, this is connected with safer online participation, privacy choices, scam awareness, responsible sharing and digital autonomy.

For SMART AGE, the combination of DigComp 3.0 and Media and Information Literacy is essential. DigComp 3.0 provides a recognised digital competence structure. Media and Information Literacy adds a critical, civic and interpretative perspective. Together, they support a curriculum that goes beyond technical tool use and addresses credibility, manipulation, AI-generated content, algorithmic influence, privacy, safety, well-being, responsible communication and civic participation.

SMART AGE does not follow the DigComp competence areas one by one. Instead, it **translates selected digital competences into ten practical learning outcome clusters that are easier to use in a curriculum for older adults**. The clusters act as a bridge between DigComp 3.0, Media and

Information Literacy and the SMART AGE learning pathway. They keep the curriculum connected to recognised competence frameworks, while making it more understandable, usable and relevant for older learners.

The SMART AGE curriculum is organised around ten learning outcome clusters:

Cluster	Main focus
1. Information and Media Literacy	Understanding digital information, media messages, sources, credibility and framing.
2. Disinformation and Manipulation Awareness	Recognising misleading content, emotional pressure, manipulation strategies and disinformation patterns.
3. AI-Generated Content Awareness	Understanding that text, images, audio and video can be generated or altered by artificial intelligence and require careful assessment.
4. Algorithmic Awareness and Information Exposure	Recognising that platforms, feeds and recommendation systems influence what users repeatedly see online.
5. Digital Safety and Scam Awareness	Identifying risky digital situations, scams, suspicious links, impersonation and pressure tactics.
6. Privacy and Data Protection	Understanding personal data, careful sharing, digital footprints and basic privacy protection.
7. Digital Well-being and Emotional Resilience	Managing digital overload, emotional reactions, uncertainty, stress and fear in online environments.
8. Responsible Sharing and Communication	Communicating respectfully, checking before sharing and understanding the consequences of online actions.
9. Civic and Democratic Participation Online	Participating in digital public life with awareness of credibility, manipulation, polarisation and responsibility.
10. Reflective Digital Autonomy and Transfer	Applying learned strategies to new digital situations and building personal routines for safer digital participation.

Together, these clusters form the conceptual basis of the SMART AGE micro-credential curriculum. **Each cluster becomes one curriculum module** in Part B. **Each module includes ten clearly operationalised learning outcomes** derived from its corresponding cluster. This one-to-one structure supports transparency, assessment alignment and micro-credential recognition: one cluster defines the competence area, one module provides the learning pathway, and ten module-level outcomes specify what the learner is expected to know, understand or be able to do after completing that module.

The ten-outcome structure also supports curriculum coherence. It makes the relationship between competence framework, module content, learning activities and assessment easier to check. It does not mean that each outcome must be taught in isolation or assessed through a separate test item. Outcomes are addressed through units, examples, scenarios, routines, quizzes, reflection prompts and applied tasks. However, each of the ten outcomes must remain visible, understandable and operationalised within the module structure.

The modules are therefore not isolated topics, but parts of a progressive learning pathway that moves from understanding digital information to acting with greater independence, confidence and responsibility. The curriculum begins with credibility, source evaluation and media interpretation. It then moves to disinformation, AI-generated content, algorithmic exposure, scams, privacy and well-being. Later modules focus on responsible sharing, civic participation and transfer of learning to new and unfamiliar digital situations.

Problem solving is treated as a transversal competence across all clusters. In SMART AGE, problem solving is not limited to fixing technical issues. It also includes recognising uncertainty, choosing a safer response, comparing information, stopping before clicking, asking for help when needed and transferring learned strategies to new situations. This reflects the reality that older adults often need practical judgement rather than only procedural technical instructions.

The curriculum is also informed by selected good practices in media literacy, digital literacy, AI awareness, online safety and education of older adults, collected in the SMART AGE Compendium of

best practices. These good practices help translate competence frameworks into practical learning design, with short learning steps, familiar examples, guided reflection, simple language, repeated routines and learner support.

This combined framework and cluster structure supports both coherence and transferability. It gives the curriculum a clear educational sequence, while allowing other organisations to understand the main learning areas without working directly with the full DigComp 3.0 framework. A more detailed mapping between the SMART AGE clusters and DigComp 3.0 is provided in Appendix 1.

5. Learning design principles for older learners

The SMART AGE curriculum is designed around the learning characteristics, needs and strengths of older adults. It does not use a tool-first or school-like learning sequence. Instead, it starts from recognisable digital and media situations, connects them with learners' experience, supports interpretation and judgement, and only then moves towards practical digital action.

This approach is informed by the *Experience-Driven Media-Digital Taxonomy*. The taxonomy starts **from the idea that older learners bring life experience, contextual judgement and reflective capacity into the learning process**. Learning therefore begins with situations learners can recognise, compare and interpret, rather than with technical instructions or abstract definitions. Digital action follows understanding.

In SMART AGE, older learners are not treated as beginners in life, judgement or social understanding. They may be beginners in some digital environments, but they often bring strong capacities for comparison, ethical reasoning, caution, community knowledge and reflection. The curriculum uses these strengths as learning resources.

For this reason, SMART AGE uses a geragogically informed learning approach. The term “learning design principles” is used here to avoid reducing older adult learning to school-based pedagogy. The focus is on how learning is organised so that older adults can understand, practise, reflect and transfer what they learn into everyday digital life.

Learning design principle	Meaning for SMART AGE curriculum and MOOC design
Respect for learners' experience	Older adults bring personal, social and professional experience into the learning process. This experience is treated as a learning resource, not as outdated or irrelevant.
Everyday relevance	Learning begins from situations that learners can recognise: receiving a suspicious message, reading health information online, using public services, communicating with family, seeing emotional posts on social media or deciding whether to share information.
Simple and clear language	Digital and media literacy topics often include technical terms. Terms are explained in plain language, introduced gradually and repeated when needed. The aim is not to avoid important concepts, but to make them usable.
Careful pacing	Older learners may need more time to read, compare, reflect and repeat. Learning is divided into short and manageable steps. Each step has a clear purpose and avoids unnecessary overload.
Confidence-building	Many older learners are not only learning new content. They are also strengthening confidence in their ability to act independently in digital situations. Learning avoids fear, shame and pressure. It helps learners recognise risks while also showing what they can do.
Guided repetition	Key routines appear repeatedly across the learning pathway. Learners repeatedly practise pausing before clicking, checking the source, comparing information, recognising emotional pressure, protecting personal data and asking for help when needed.
Learning through realistic scenarios	Media and digital literacy are easier to understand when learners work with situations rather than only definitions. Scenarios are short, recognisable and adaptable to national and local contexts.
Reflection before action	SMART AGE does not aim to teach automatic reactions. It aims to strengthen judgement. Learners are invited to ask simple questions: Who created this? Why am I seeing it? What does it want me to do? How do I feel when I read it? What information is missing? Should I check another source?
Accessibility	Learning materials are designed to be easy to read, easy to navigate and suitable for different learner needs. This includes clear layout, readable text, good contrast, captions or transcripts for videos, simple instructions, predictable structure and options for slower learning.
Autonomy with support	Digital autonomy does not mean solving every problem alone. It means understanding enough to make informed decisions, including the decision to stop, check, compare or ask a trusted person or organisation for help.
Local and cultural adaptation	Older learners understand digital issues more easily when examples are connected to their everyday environment. Public services, media habits, common scams, communication channels and civic participation contexts differ between countries and communities. Examples are localised responsibly in partner-language and national adaptations.

Positive digital participation	The curriculum does not present the digital world only as a place of danger. Digital media can support communication, access to services, learning, creativity, community life and civic participation. SMART AGE therefore balances risk awareness with confidence, autonomy and meaningful participation.
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These principles are especially important for asynchronous online learning. In a self-paced MOOC, learners do not always have an instructor beside them to explain unclear terms, reduce anxiety or check whether they understood a task. The learning design must therefore build support directly into the course structure. This includes short units, clear instructions, repeated routines, realistic examples, immediate feedback, downloadable reminders, simple navigation and opportunities for reflection before action.

The principles also guide assessment. Assessment does not create unnecessary pressure or resemble a formal examination. It helps learners show that they can recognise, interpret and respond to digital situations more safely and responsibly. Suitable assessment methods include short quizzes, scenario-based questions, true/false questions, gap-fill tasks, reflection prompts and applied decision-making tasks. Feedback explains why an answer is safer, less safe, more reliable or more questionable.

The same principles guide any organisation that adapts the curriculum for workshops, blended learning, community education, local online courses or other formats. The form of delivery may change, but the learning approach remains respectful, practical, accessible and focused on older learners' autonomy.

The overall learning logic can be summarised as follows: start from familiar experience, compare the situation, interpret meaning and intention, make an informed judgement, choose a safe and purposeful action, and transfer the routine to new digital situations. This logic connects the learning design principles with the full SMART AGE curriculum pathway.

6. Micro-credential logic, recognition and transferability

The **SMART AGE curriculum is designed as a micro-credential learning pathway**. This means that it is not only a list of topics, but a structured learning programme with defined learning outcomes, indicative workload, assessment principles and recognition of completion. Its purpose is to make a focused and meaningful learning experience visible, understandable and transferable.

The curriculum follows the **European approach to micro-credentials**. In this approach, a micro-credential records the learning outcomes that a learner has acquired after a small volume of learning. These learning outcomes are assessed against transparent and clearly defined standards. Courses leading to micro-credentials provide specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. They also provide transparent information for learners, providers and other stakeholders about what was learned, how learning was assessed and what kind of recognition was issued.

In simple terms, a micro-credential shows that a learner has completed a clearly defined learning experience and has demonstrated the expected learning outcomes. It is significantly shorter than a traditional full qualification, but it remains clear and trustworthy. It explains what was learned, how much learning time was involved, how learning was assessed, how the learning activity was delivered and which organisation issued the recognition.

For the SMART AGE curriculum, the micro-credential structure is organised around the following mandatory elements:

Mandatory element	SMART AGE curriculum application
Identification of the learner	The SMART AGE MOOC identifies the learner who completes the learning pathway and receives recognition.
Title of the micro-credential	SMART AGE Micro-Credential in Media Literacy and Digital Resilience for Older Adults (or the final SMART AGE MOOC title adopted by the consortium)
Country/Region of the issuer	The recognition states the country or region of the organisation issuing the certificate or equivalent record.
Awarding body	The recognition states the organisation responsible for issuing it. In the official SMART AGE implementation, this is linked to the consortium's agreed recognition model. In adaptations, it is the responsibility of the adapting organisation.
Date of issuing	The recognition states the date on which the learner completed the required learning pathway and received recognition.
Learning outcomes	The curriculum is structured around ten modules. Each module is based on one learning outcome cluster and includes ten clearly operationalised learning outcomes.
Notional workload needed to achieve the learning outcomes	The recognised curriculum workload is 75 hours, equivalent to approximately 3 ECTS where applicable. This workload is calculated across the ten curriculum modules only. The introductory orientation section and final closing section support the MOOC experience, but they are not counted as part of the 75-hour curriculum workload.
Type of assessment	Assessment includes module quizzes, scenario-based questions, True/False questions, Gap Fill questions, reflection prompts, completion tracking or equivalent assessment tasks aligned with the learning outcomes.
Form of participation in the learning activity	The SMART AGE MOOC will be asynchronous, online and self-paced. The curriculum may also be adapted for blended, guided or community-based formats if the form of participation is clearly stated.
Type of quality assurance used to underpin the micro-credential	Quality assurance is based on alignment with DigComp 3.0 and Media and Information Literacy principles, external expert review of learning outcomes, partner review, integration of good practices, beta testing with older learners and revision based on feedback.

Where applicable, especially in formal national adaptations, the issuer may also state the level of the learning experience in relation to the relevant qualifications framework, such as EQF or a national qualifications framework. In the SMART AGE project implementation, the curriculum is not presented as a formally registered national qualification. It therefore uses workload, learning outcomes, assessment

and quality assurance information to support transparency, while formal qualification-framework referencing remains the responsibility of authorised providers in national or institutional adaptations.

In SMART AGE, the full micro-credential pathway consists of ten assessed modules. The indicative workload is 75 hours, equivalent to approximately 3 ECTS where applicable. The introductory orientation section and the final closing section will be included in the SMART AGE MOOC to support navigation, motivation, reflection and completion, but they are not part of the recognised 75-hour curriculum workload. The detailed workload structure is presented in Part B.

The main unit of recognition in the SMART AGE implementation is the full learning pathway. Learners who complete all required modules and assessment activities in the SMART AGE MOOC receive recognition for completing the micro-credential. This recognition is not based only on time spent in the course. Learners demonstrate engagement with the intended learning outcomes through quizzes, scenario-based tasks, reflection prompts, completion tracking or equivalent assessment activities.

Assessment remains clear, accessible and proportionate to older learners. Its purpose is not to create examination pressure, but to provide evidence that learners can recognise risks, interpret digital situations, make safer decisions and apply critical judgement. Feedback supports learning by explaining why a response is safer, less safe, more reliable or more questionable.

The modular structure also supports visible progress during learning. The SMART AGE MOOC will use module badges to mark completion of individual modules and support motivation and orientation in the asynchronous learning pathway. Module badges will be clearly distinguished from completion of the full SMART AGE micro-credential. A module badge will show progress within the pathway; final recognition will show completion of the full learning pathway.

The curriculum is also transferable. Adult education organisations, libraries, older adult associations, community centres, NGOs and other stakeholders may use the curriculum to design workshops, blended learning formats, guided group sessions or local online courses. They may use the full pathway, individual modules or combinations of modules, depending on their context and learners' needs.

The SMART AGE curriculum and other educational documents developed within the project are Open Educational Resources. They are available for use and adaptation under the Creative Commons licence stated in the project materials. Organisations that use or adapt the curriculum must reference SMART AGE and clearly state that their activity is based on or adapted from the SMART AGE curriculum.

However, using the curriculum as a source does not automatically make another course, workshop, certificate, badge, platform or programme a SMART AGE product. The SMART AGE micro-credential is linked to the complete learning pathway, the defined workload, the completion requirements, the assessment logic and the quality assurance model adopted in the project implementation. Other organisations may issue their own certificates, attendance confirmations, badges or other forms of recognition, but these records must clearly state the issuing organisation, scope of learning, workload, learning outcomes, assessment method and form of participation.

This approach balances two needs. It gives the SMART AGE MOOC a clear micro-credential structure, while allowing the curriculum to remain useful beyond the project. It supports reuse, localisation and adaptation, but also protects transparency and credibility. The micro-credential remains simple, transparent and learner-centred. Its purpose is to make meaningful learning visible and to support older adults in applying that learning in everyday digital life.

7. Curriculum design principles and quality assurance

The SMART AGE curriculum is designed as a structured and reusable micro-credential curriculum. It is more than a list of topics. It presents a clear learning pathway, a logical order of modules, defined learning outcomes, assessment principles, workload logic, quality criteria and guidance for later implementation.

The curriculum must be understandable for several groups at the same time: older learners, adult educators, MOOC developers, project partners, adapting organisations and stakeholders interested in micro-credentials. For this reason, the curriculum uses a transparent structure. Part A explains the rationale and framework. Part B presents the full micro-credential curriculum. Part C explains implementation, adaptation and reuse.

The curriculum is guided by the following design and quality principles:

Principle	Meaning for the SMART AGE curriculum
Coherence	All parts of the curriculum work together. Learning outcomes, modules, learner activities, assessment and recognition support the same educational purpose: helping older adults become more confident, critical and autonomous in everyday digital life.
Outcome alignment	Each of the ten modules is based on one learning outcome cluster. Each module includes ten clearly operationalised learning outcomes. Module content, examples, activities and assessment tasks remain aligned with these outcomes.
Progression	The curriculum begins with more familiar tasks, such as understanding information and media messages. It then moves toward more complex challenges, including disinformation, AI-generated content, algorithmic influence, scams, privacy, digital well-being and civic participation. The final part of the pathway focuses on transfer: helping learners apply what they have learned in new digital situations.
Practical relevance	Learning is connected to situations that older adults may actually experience. The curriculum helps learners deal with messages, websites, posts, videos, scams, privacy choices, emotional pressure, AI-generated content and online discussions that appear in everyday digital life.
Older-learner-oriented learning design	The curriculum uses simple language, careful pacing, repetition, realistic scenarios, confidence-building, accessible structure and respect for learners' experience. It avoids patronising language, unnecessary technical density and fear-based learning.
Evidence of learning	Because SMART AGE is a micro-credential curriculum, learners have opportunities to show that learning has taken place. This evidence is linked to learning outcomes and includes quizzes, short tasks, reflection activities, scenarios, learner routines, completion tracking or equivalent assessment elements. Assessment remains clear, accessible and supportive.
Transparency of workload and recognition	The curriculum clearly states the workload, completion requirements, assessment basis and form of recognition. The 75-hour workload applies to the ten curriculum modules. Introductory and final MOOC sections may support the learning experience, but they are not counted as part of this workload.
Transferability	The curriculum is reusable by adult education organisations, libraries, older adult associations, NGOs, community centres and other stakeholders. Responsible reuse preserves the core learning outcomes, workload logic, assessment alignment and older-learner-oriented approach.
Responsible adaptation	Local and national adaptations may change examples, media cases, support links, delivery formats and language. However, they must not remove the core competence logic or present adapted activities as SMART AGE products unless authorised.
Sustainability	The curriculum remains useful after the project. Its most sustainable elements are not platform-specific instructions, but learning outcomes, routines, scenarios, assessment logic and transferable judgement strategies.

Quality assurance is not only a final check at the end of the process. It is built into curriculum development through alignment with recognised frameworks, integration of good practices, partner cooperation, external review, revision and later testing with older learners.

The first quality layer is framework alignment. SMART AGE uses DigComp 3.0 as its main European digital competence reference and enriches it with Media and Information Literacy principles. This ensures that the curriculum is connected to recognised competence language while remaining adapted to the everyday needs of older adults.

The second quality layer is learning outcome clarity. The curriculum uses ten learning outcome clusters and transforms them into ten modules. Each module contains ten clearly operationalised learning outcomes. This structure makes it possible to check whether the module content, activities and assessment tasks correspond to the intended learning.

The third quality layer is external review. External review was carried out in two stages. First, the SMART AGE learning outcome framework was reviewed by 12 external experts and stakeholders with experience in adult education, media literacy, digital education, e-learning, social work, community support, culture, library and information science, education of older adults, inclusion and accessibility. Their feedback validated the adapted learning outcome structure and informed the development of the ten-module curriculum. The complete SMART AGE curriculum was reviewed by five external reviewers with expertise in adult education, education of older adults, media and information literacy, digital competence, curriculum development, accessibility, inclusion and online learning. The review examined the curriculum framework, the ten-module pathway, learning outcomes, workload, assessment, MOOC readiness and suitability for older adults. Across 65 Likert-scale ratings, the overall mean was 4.57 out of 5 and 93.8% of all ratings were positive. All five reviewers judged the curriculum to be good and appropriate for its intended target group. The review confirmed the core curriculum architecture while identifying practical priorities for MOOC implementation.

The fourth quality layer is practical adaptation. The curriculum is designed to be transformed into an asynchronous MOOC, but also to support responsible reuse in other adult education settings. This requires a structure that is clear enough for online course developers and flexible enough for educators working in local contexts. Quality therefore depends on both consistency and adaptability.

The fifth quality layer is learner testing and revision. The MOOC implementation will be tested with older learners to check usability, accessibility, clarity, pacing, confidence-building and assessment suitability. Feedback from learners will be used to improve the final learning experience.

The recommendations from the curriculum review are treated as design inputs for the next project phase rather than as a requirement to restructure the curriculum. The ten-module architecture, programme-level competences and learning outcomes remain unchanged. All SMART AGE project partners will jointly incorporate the review findings into MOOC design, content development, localisation and beta testing. This collaborative implementation will focus especially on plain learner-facing language, terminology support where needed, flexible self-paced progression, authentic and locally recognisable examples, predictable navigation, accessible learning materials and clear routes to help or support. Beta testing with older learners will verify actual time-on-task, comprehension, navigation, need for repetition and the level of support required.

Quality assurance also means reducing avoidable risks. In SMART AGE, the main risks are content overload, excessive technical complexity, abstract language, weak connection to everyday life, unclear assessment, inaccessible design, outdated examples and overstated recognition. These risks are reduced through careful sequencing, plain language, practical examples, supportive feedback, accessibility checks, localisation guidance and transparent completion requirements.

The curriculum is therefore reviewed through practical quality questions:

Quality question	Purpose
Is the curriculum understandable for older learners?	Checks language, structure, readability and accessibility.
Is it relevant to everyday digital life?	Checks practical usefulness and connection to real situations.
Are all ten modules connected to their corresponding learning outcome clusters?	Checks structural coherence.
Does each module clearly operationalise ten learning outcomes?	Checks outcome transparency and assessment readiness.
Are learning outcomes, module content, learner activities and assessment aligned?	Checks curriculum coherence and micro-credential validity.
Is the 75-hour workload clearly connected to the ten modules?	Checks transparency of workload and recognition.
Is assessment supportive, accessible and proportionate?	Checks suitability for older learners.
Does the curriculum support asynchronous MOOC implementation?	Checks implementation value for the SMART AGE MOOC.
Can the curriculum be adapted responsibly by other organisations?	Checks transferability and sustainability.
Is recognition described accurately and transparently?	Checks credibility of the micro-credential logic.

These design and quality principles guide the rest of the document. Part B translates them into the full SMART AGE micro-credential curriculum with ten modules, ten learning outcome clusters and ten operationalised outcomes per module. Part C explains how the curriculum will be implemented through the SMART AGE MOOC and how it can be adapted for wider use.

Part B – SMART AGE Micro-Credential Curriculum

8. Curriculum overview

8.1 Purpose of part B

Part B presents the SMART AGE curriculum as a structured micro-credential learning pathway. It translates the competence framework described in Part A into ten curriculum modules, each connected with one learning outcome cluster.

The curriculum is designed for older adults, especially learners aged 60 and above, who already have basic independent access to internet-connected devices. It does not replace introductory courses on how to use a computer, smartphone or the internet. Instead, it supports media literacy, digital resilience, critical judgement and safer participation in digital environments.

The curriculum is based on the SMART AGE learning outcome clusters. These clusters were developed through the adaptation of DigComp 3.0 and media and information literacy principles to the needs of older learners. They were reviewed by 12 external experts and stakeholders from relevant fields, including adult education, media literacy, digital education, e-learning, social work, community support, culture, library and information science, education of older adults, inclusion and accessibility. The review process confirmed the relevance, practical orientation and suitability of the learning outcomes for the SMART AGE curriculum and MOOC. After the complete curriculum had been developed, it was submitted to a second external review. Five external reviewers assessed the full curriculum and confirmed its overall quality, relevance and appropriateness for older adults. Their recommendations did not call for changes to the ten-module structure; instead, they provide practical guidance for the design, localisation and testing of the SMART AGE MOOC. A summary of this second review is provided in Appendix 3.

Part B provides the educational structure for the SMART AGE MOOC. At the same time, it also supports responsible reuse by adult education providers, older adult organisations, libraries, community centres and non-formal learning providers that wish to adapt SMART AGE materials in their own contexts.

8.2 Overview of the ten-module learning pathway

The SMART AGE curriculum consists of ten modules. Each module corresponds to one learning outcome cluster and contains ten operationalised learning outcomes. The ten modules together form the full SMART AGE micro-credential learning pathway.

Module	Module title	Main learning focus
1	Information and Media Literacy	Understanding digital information, media messages, sources, credibility and framing.
2	Disinformation and Manipulation Awareness	Recognising misleading content, emotional pressure, manipulation strategies and disinformation patterns.
3	AI-Generated Content Awareness	Understanding AI-generated text, images, audio and video, recognising their risks and applying careful verification strategies.
4	Algorithmic Awareness and Information Exposure	Recognising that platforms, feeds and recommendation systems influence what users repeatedly see online.
5	Digital Safety and Scam Awareness	Identifying risky digital situations, scams, suspicious links, impersonation and pressure tactics.
6	Privacy and Data Protection	Understanding personal data, careful sharing, digital footprints and basic privacy protection.

7	Digital Well-being and Emotional Resilience	Managing digital overload, emotional reactions, uncertainty, stress and fear in online environments.
8	Responsible Sharing and Communication	Communicating respectfully, checking before sharing and understanding the consequences of online actions.
9	Civic and Democratic Participation Online	Participating in digital public life with awareness of credibility, manipulation, polarisation and responsibility.
10	Reflective Digital Autonomy and Transfer	Applying learned strategies to new digital situations and building personal routines for safer digital participation.

The order of modules is intentional. The learning pathway begins with basic information and media judgement, then moves toward more complex risks such as manipulation, AI-generated content, algorithmic exposure, scams and privacy. Later modules focus on well-being, responsible communication, civic participation and transfer to new digital situations.

This sequence supports gradual progression. Learners first develop checking habits, then apply them in increasingly complex and realistic digital situations.

8.3 Programme-level competences achieved through the full SMART AGE MOOC

The SMART AGE curriculum is organised around ten programme-level competences. Each module develops one broad competence and operationalises it through ten detailed learning outcomes. Together, these ten competences describe the expected learning profile of a learner who successfully completes the full SMART AGE MOOC.

The table below provides a concise overview of the competences connected with each module. These competences support curriculum transparency, micro-credential documentation and communication with learners, partners and stakeholders. They do not replace the detailed module learning outcomes. The detailed learning outcomes remain the basis for learning activities, assessment tasks and evidence of learning.

Module	Module title	Programme-level competence developed through the module
1	Information and Media Literacy	The learner can critically assess digital information and media messages by identifying content type, checking sources, recognising framing and comparing information before trusting or sharing it.
2	Disinformation and Manipulation Awareness	The learner can recognise misleading or manipulative digital content, identify emotional pressure and choose a safer checking or response strategy before reacting to or sharing it.
3	AI-Generated Content Awareness	The learner can recognise that digital content may be generated or altered by artificial intelligence and can critically assess AI-generated or AI-assisted content before trusting, using or sharing it.
4	Algorithmic Awareness and Information Exposure	The learner can recognise that online platforms personalise and recommend content, understand how repeated exposure can shape perception, and apply simple strategies to broaden information exposure.
5	Digital Safety and Scam Awareness	The learner can recognise common digital scam warning signs and apply safer responses before clicking, replying, paying or sharing personal information.
6	Privacy and Data Protection	The learner can recognise personal data, make informed privacy choices and apply basic data-protection strategies in everyday digital situations.
7	Digital Well-being and Emotional Resilience	The learner can recognise how digital content and online interactions affect mood, stress and confidence, and can apply simple self-regulation strategies to maintain healthier digital habits.
8	Responsible Sharing and Communication	The learner can make responsible decisions before sharing, forwarding, commenting or replying online, with awareness of accuracy, privacy, emotional impact and possible social consequences.
9	Civic and Democratic Participation Online	The learner can identify trustworthy civic information, recognise manipulation in public digital communication and participate in online civic spaces in an informed, respectful and responsible way.
10	Reflective Digital Autonomy and Transfer	The learner can reflect on personal digital learning, select appropriate judgement routines and transfer them to unfamiliar or changing digital situations with confidence and appropriate support.

These ten competences are connected to the full SMART AGE learning pathway. Individual modules contribute to the development of specific competences, but completion of individual modules does not constitute a separate SMART AGE micro-credential. The SMART AGE micro-credential is awarded only after successful completion of the full MOOC, including all ten modules and the required assessment activities.

The certificate or equivalent recognition record should refer to these ten programme-level competences and to the detailed module learning outcomes that provide the assessment basis for the SMART AGE micro-credential.

8.4 Common module structure

All ten modules follow a common structure. This supports transparency, comparability and easier implementation in the MOOC.

Each module includes:

Module element	Function
Module Summary	Provides a concise overview of the module, workload, main focus, competence, outcome cluster, routine and assessment approach.
Module context	Explains why the module matters for older learners and how it connects with everyday digital life.
Key learner questions	Presents the module through practical questions that learners may recognise from real situations.
Learning outcomes and evidence of learning	Lists ten operationalised learning outcomes and possible evidence that the learner has achieved them.
Suggested unit structure and workload	Divides the module into manageable learning units and assigns indicative workload.
Unit guidance	Explains the purpose of each unit and presents suggested learner activities in table form.
Assessment	Describes what is assessed and which question types are suitable for the MOOC.
Learner routine	Provides a short practical routine that learners can use outside the course.
Tailored approach to the target group	Explains how the module is adapted to older learners.
Completion criteria	States what completion of the module demonstrates.
Link to the next module	Shows how the module connects with the following part of the learning pathway.

This common structure helps ensure that all modules are aligned with the micro-credential logic of the curriculum. It also makes the curriculum easier to translate into the MOOC environment, where learners need predictable navigation, clear instructions and repeated formats.

8.5 Workload logic

The full SMART AGE micro-credential learning pathway consists of ten modules with a total workload of 75 hours, equivalent to approximately 3 ECTS where applicable.

Each module has an indicative workload of 7.5 hours. The equal distribution supports clarity, comparability and transparency. It also makes it easier for learners, partners and implementing organisations to understand the structure of the pathway.

The 75-hour workload refers only to the ten curriculum modules. The introductory section and final closing section support orientation, technical preparation, final reflection and recognition, but they are not counted as additional curriculum modules.

Workload is not understood only as time spent reading or watching videos. It also includes learner activities such as checking examples, answering quizzes, comparing sources, applying routines, reflecting on personal habits, reviewing feedback and completing assessment tasks.

More detailed workload guidance is provided in Chapter 9.

8.6 Assessment logic within the modules

Assessment is integrated into each module. It is designed to confirm that learners have engaged with the learning outcomes and can apply key ideas in practical situations.

The assessment approach is proportionate and accessible. It does not imitate a formal school examination. Instead, it helps older learners practise judgement and receive immediate feedback.

Suitable assessment formats include:

Assessment format	Use in the curriculum
Multiple Choice	Choosing safer actions, recognising warning signs, identifying suitable sources or selecting appropriate routines.
True/False	Checking understanding of key concepts, common misconceptions and basic safety principles.
Gap Fill	Reinforcing key terms and simple routines.
Scenario-based questions	Applying judgement to realistic digital situations.
Reflection prompts	Supporting awareness of personal habits, confidence and future use.

In the SMART AGE MOOC, automatically checked activities and immediate answer feedback will be used wherever technically possible. This will support asynchronous learning and allow learners to progress without waiting for an instructor.

Assessment is explained in more detail in Chapter 10 and in the individual module descriptions.

8.7 Use in the MOOC and other adaptations

The SMART AGE MOOC will implement the full ten-module pathway. The full SMART AGE micro-credential is connected only to completion of the complete MOOC, including all ten modules and the required assessment activities.

The curriculum can also be used in other adult education contexts. Organisations may use the full curriculum, selected modules or combinations of modules for workshops, blended learning, local training, community education or non-formal learning activities. Such adaptations can be valuable, especially when working with older learners in different local, linguistic or cultural contexts.

However, adaptations must be described transparently. If only one module, several modules or a shortened version of the curriculum is used, this must not be presented as completion of the SMART AGE micro-credential. It may be described as an adapted learning activity, workshop, course or training session based on SMART AGE materials.

Organisations using or adapting the curriculum must acknowledge the SMART AGE project and follow the Creative Commons licence stated in the project materials. They must also avoid presenting adapted versions as SMART AGE products unless this has been authorised by the project partnership.

The curriculum is therefore both structured and transferable. It defines a complete micro-credential pathway for the SMART AGE MOOC, while also allowing responsible reuse and adaptation in broader adult education practice.

9. Learning pathway and workload structure

The SMART AGE Micro-Credential Curriculum is organised as a 75-hour notional learning pathway, equivalent to approximately 3 ECTS where applicable. The 75-hour figure is the common indicative reference for the intended learning effort and for transparent micro-credential documentation; it is not a fixed completion time that every learner is expected to match. Actual learning time may vary according to prior digital experience, reading pace, confidence, need for repetition, technical familiarity and use of optional support. The SMART AGE MOOC will therefore preserve the 75-hour curriculum reference while allowing learners to progress at a self-selected pace.

The recognised 75-hour workload applies only to the ten curriculum modules. The introductory orientation section and the final closing section will be included in the SMART AGE MOOC learning experience, but they are not counted as part of the 75-hour micro-credential workload. They support navigation, motivation, reflection and completion, while the ten modules form the assessed curriculum core.

Curriculum element	Indicative workload
Module 1: Information and Media Literacy	7.5 hours
Module 2: Disinformation and Manipulation Awareness	7.5 hours
Module 3: AI-Generated Content Awareness	7.5 hours
Module 4: Algorithmic Awareness and Information Exposure	7.5 hours
Module 5: Digital Safety and Scam Awareness	7.5 hours
Module 6: Privacy and Data Protection	7.5 hours
Module 7: Digital Well-being and Emotional Resilience	7.5 hours
Module 8: Responsible Sharing and Communication	7.5 hours
Module 9: Civic and Democratic Participation Online	7.5 hours
Module 10: Reflective Digital Autonomy and Transfer	7.5 hours
Total recognised curriculum workload	75 hours

The equal indicative distribution of 7.5 hours per module supports transparency and curriculum planning. It provides a common reference for aligning the ten learning outcomes, content, activities and assessment in each module. However, it does not mean that every learner will spend exactly 7.5 hours in every module. Some learners may move more quickly through familiar topics, while others may need additional time for reading, repetition, examples, reflection or navigation. During MOOC development and beta testing, the project partners will examine actual time-on-task and use the findings to refine pacing guidance while preserving the overall 75-hour notional workload of the learning pathway.

This does not mean that every unit inside a module must have the same length. Some units may require more time because they include comparison of examples, scenario-based decisions, privacy checks or applied routines. Other units may be shorter and focus on key terms, short explanations or simple recognition tasks. The module workload is understood as the total expected learning effort needed to achieve the ten module outcomes.

The workload is not understood as screen time only. Meaningful learning may include reading, watching, listening, comparing examples, completing quizzes, reflecting on personal experience, trying a simple check, using a downloadable routine, discussing a scenario with someone trusted or applying a strategy in everyday life. These activities all belong to the learning process when they support the module outcomes.

In the SMART AGE MOOC, the introductory orientation section will help learners understand how to use the platform, how the course is structured, how progress is tracked and how assessment works. It will include a short welcome element, navigation guidance, a simple explanation of the learning pathway

and a low-pressure orientation activity. This section is useful for accessibility and learner confidence, but it remains outside the recognised 75-hour curriculum workload.

The final closing section should help learners review their progress, reflect on what they have learned and understand what their recognition means. It includes a short final reflection, guidance on continued learning and a reminder of key routines. Where appropriate, it also includes a Personal Digital Autonomy Plan or equivalent consolidation activity. Like the introductory section, it supports the MOOC experience but is not counted as part of the 75-hour curriculum workload.

The workload structure also supports accessibility. Instead of presenting the curriculum as one large course, the pathway is divided into ten manageable modules. This helps learners understand where they are, what they have completed and what comes next. It also helps educators and organisations plan learning in smaller steps, especially when the curriculum is adapted for guided groups, blended learning or community-based education.

The full 75-hour workload expresses the educational ambition of the curriculum. SMART AGE does not aim to offer a brief awareness campaign only. It provides a structured learning pathway that gives older adults enough time to understand, practise, reflect and build confidence in everyday digital life.

10. Assessment

Because SMART AGE is designed as a micro-credential curriculum, learning must be connected to evidence. Learners do not receive recognition only because they have opened materials, watched videos or spent time in the course. They complete assessment activities that show engagement with the learning outcomes and demonstrate that they can apply safer, more critical and more responsible digital judgement.

Evidence of learning means visible proof that learning has taken place. In SMART AGE, this evidence is practical, accessible and proportionate to older learners. It includes quiz results, scenario-based answers, completed routines, short reflection prompts, checklists, guided tasks, completion tracking in the MOOC or equivalent evidence of learning. Evidence is connected to the module learning outcomes, not to abstract testing alone.

The purpose of assessment is not to create pressure or reproduce school-like examination. Assessment helps learners confirm what they understand, receive feedback, recognise their progress and apply safer digital judgement. It supports learning rather than interrupts it.

The assessed core of the full SMART AGE pathway consists of the ten curriculum modules. Each module is based on one learning outcome cluster and includes ten clearly operationalised learning outcomes. Assessment in each module is aligned with these outcomes. This does not mean that each outcome needs a separate formal test, but the module assessment provides enough evidence that the learner has engaged with the full outcome set.

The introductory orientation section and the final closing section may include orientation questions, reflection prompts or completion guidance, but they do not function as assessed curriculum modules. The ten modules provide the main basis for progress tracking and final recognition.

Assessment focuses on practical judgement. Learners are asked to recognise a suspicious message, compare two sources, identify emotional pressure, choose a safer response, protect personal data, decide whether to share content or apply a simple checking routine. These tasks are more appropriate for SMART AGE than abstract definitions or technical terminology tests alone.

In the SMART AGE MOOC, assessment must work in an asynchronous online environment. Learners will move through the course independently and at their own pace. For this reason, assessment must be simple, transparent, automatically graded where technically possible and supported by immediate feedback. Learners will not have to wait for an instructor in order to understand whether their answer was appropriate and why. Instant feedback will make the MOOC more accessible because learners will be able to study at any time, from any place and at their own pace.

The recommended question types for the SMART AGE MOOC are:

Question type	Main use in SMART AGE
Multiple Choice	Recognition, comparison, safer choices, credibility cues, warning signs and appropriate responses.
True/False	Basic understanding of key concepts, common misconceptions and simple risk-awareness statements.
Gap Fill	Key terms, simple routines, warning signs and short decision-making principles.

Each quiz question includes feedback for both correct and incorrect answers. Correct-answer feedback explains why the answer is appropriate. Incorrect-answer feedback does not simply tell the learner that they are wrong. It explains the misunderstanding in plain language and guides the learner toward a safer, more accurate or more responsible interpretation.

A useful feedback structure is:

Feedback type	Function
Correct-answer feedback	Confirms the learner's choice and briefly explains the reasoning.
Incorrect-answer feedback	Explains why the answer is less safe, incomplete or inaccurate without shaming the learner.
Safety-oriented feedback	Reinforces practical routines such as stop, check, compare, verify, protect personal data or ask for help.
Transfer-oriented feedback	Helps the learner apply the same idea in another digital situation.

Each module includes several smaller learning units. In the SMART AGE MOOC, each unit should normally end with a short quiz or equivalent knowledge check. In most cases, a unit quiz should contain 3–5 questions. Larger or more complex units may contain 5–8 questions, but long testing blocks should be avoided. Shorter checks are more suitable for older learners and support gradual confidence-building.

Assessment is distributed across the module rather than concentrated only at the end. This allows learners to check understanding step by step. It also reduces anxiety and helps them return to specific content if they need clarification.

Scenario-based assessment is especially important. Older learners do not only remember definitions. They practise decision-making in realistic situations. For example, a learner may be shown a short message that asks for personal data, a social media post with emotional language, an AI-generated image, a forwarded health claim or a suspicious link. The task can then ask the learner to choose the safest response, identify a warning sign or apply a checking routine.

Reflection prompts are also used as evidence of learning where they support self-assessment, transfer or consolidation. In an asynchronous MOOC, reflection prompts may not always be graded in detail, but they can support self-assessment and transfer. They can ask learners to think about a similar message they have received, a source they trust, a moment when they felt digital pressure, or a personal routine they want to use in the future.

The assessment design should follow these principles:

Assessment principle	Meaning for SMART AGE
Outcome-based	Each assessment activity connects to one or more module learning outcomes.
Practical	Tasks use realistic situations rather than abstract theory only.
Accessible	Questions are short, clear and written in plain language.
Supportive	Feedback explains the answer calmly and constructively.
Proportionate	Assessment fits the module workload and does not overload learners.
Varied enough	Assessment includes recognition, comparison, safer choices, reflection and simple application.
Non-punitive	Assessment should avoid shame, fear or unnecessary pressure.
Transparent	Learners know what is required for progress and final recognition.

Evidence of learning may differ across delivery formats. In the MOOC, evidence will mostly come from quiz completion, automated checks, progress tracking, reflection prompts and module completion records. In blended or guided adaptations, evidence may also include facilitator observation, group discussion, printed worksheets, oral responses, guided exercises or locally designed tasks. In all formats, the evidence remains connected to the learning outcomes and is described transparently.

The minimum assessment expectation for each module is that learners complete the required module activities and demonstrate engagement with the ten module learning outcomes through short quizzes, scenario-based decisions, reflection prompts or equivalent tasks. The final recognition of the full SMART AGE micro-credential is linked to completion of all ten modules and their required assessment activities.

Assessment in SMART AGE should therefore be understood as part of learning. It gives learners the opportunity to practise judgement, receive feedback, recognise progress and build confidence. Its purpose is to make learning visible while supporting older adults in applying what they learn in everyday digital life.

11. Module 1: Information and media literacy

11.1 Module summary

Element	Description
Module title	Information and Media Literacy
Indicative workload	7.5 hours
Main focus	Understanding digital information, media messages, sources, credibility and framing
Main competency achieved in this module	The learner can critically assess digital information and media messages by identifying content type, checking sources, recognising framing and comparing information before trusting or sharing it.
Corresponding learning outcome cluster	Cluster 1: Information and Media Literacy
Main practical routine	Personal Credibility Routine
Main assessment approach	Short quizzes, source-checking scenarios, comparison tasks and application of a credibility routine

11.2 Module context

Older adults encounter digital information every day: online news, social media posts, forwarded messages, public service updates, health advice, advertisements, videos, search results and comments. Some of this information is useful and reliable. Some is incomplete, exaggerated, misleading or presented in a way that influences interpretation.

This module provides the foundation for the whole SMART AGE learning pathway. Before learners can recognise disinformation, AI-generated content, scams or manipulation, they need simple strategies for understanding what kind of information they are seeing, who created it, why it may have been shared and whether it can be trusted.

The module does not treat learners as passive recipients of information. Older adults bring life experience, local knowledge, memory of previous media systems and practical judgement into the learning process. These strengths can support credibility checking, but they should be combined with careful source evaluation, comparison and awareness of framing.

The aim is not to make learners suspicious of everything online. The aim is to help them pause, check and compare before trusting, reacting to or sharing information.

11.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
What kind of information am I looking at?	Helps distinguish news, opinion, advertisement, personal story, public service message, entertainment or social media post.
Who created or shared this information?	Supports source awareness and helps learners distinguish original source from sender or sharer.
Is this fact, opinion, interpretation or narrative?	Supports clearer understanding of media messages.
What evidence is provided?	Helps learners look for support behind claims.
What is missing from the message?	Encourages attention to context, date, source, evidence and omissions.
How do other sources present the same issue?	Supports comparison and reduces dependence on one source.
How does my own experience influence how I read this?	Encourages reflection on the value and limits of personal experience.
Should I trust, check, wait, ignore or ask for help before sharing?	Connects information literacy with safer digital behaviour.

11.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Identify whether online content is factual, opinion-based or narrative-driven.	I can tell whether a message is mainly giving facts, expressing an opinion or telling a story from a certain point of view.	Learner classifies short examples of posts, headlines or messages.
2. Recognise common media formats and their typical purposes.	I can recognise different types of digital content and understand why they may have been created.	Learner matches examples with formats such as news, advertisement, public notice, opinion post, personal story or entertainment.
3. Distinguish headlines designed to inform from those designed to attract attention.	I can notice when a headline is mainly trying to inform me and when it is mainly trying to make me click, react or share.	Learner compares two headlines and identifies attention-seeking wording.
4. Evaluate the credibility of information sources using contextual cues.	I can check who published the information, when it was published, what evidence is used and whether the source seems reliable.	Learner applies a short credibility routine to one example.
5. Compare how the same event or topic is framed across different media outlets.	I can notice that different sources may present the same issue in different ways.	Learner compares two short examples and identifies differences in wording, emphasis or missing information.
6. Explain how personal experience influences interpretation of media messages.	I can recognise that my own experience may help me understand information, but may also influence what I notice first or trust more easily.	Learner answers a short reflection prompt about how prior experience may shape interpretation.
7. Assess the relevance of information for personal and civic decision-making.	I can decide whether information is useful, reliable and important enough for a personal or civic decision.	Learner explains whether they would trust, check, wait, ignore or ask for help in one example.
8. Detect subtle framing techniques affecting interpretation.	I can notice when words, images, omissions or emphasis influence how I understand a message.	Learner identifies emotional wording, one-sided emphasis or missing context in a short example.
9. Guide peers in applying credibility checks to unfamiliar sources.	I can explain a simple checking routine to another person in a respectful way.	Learner selects or writes simple advice for a peer who wants to check an unfamiliar source.

10. Adapt evaluation strategies to new or emerging media environments.	I can use the same basic checking questions when I meet a new platform, format or type of digital message.	Learner applies the Personal Credibility Routine to an unfamiliar example, such as a new social platform post, AI-like content preview or unfamiliar website.
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11.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What counts as digital information?	1 hour
Unit 2	Facts, opinions, interpretations and narratives	1 hour
Unit 3	Sources, authors, senders and credibility cues	1.5 hours
Unit 4	Headlines, framing and missing context	1.5 hours
Unit 5	Comparing sources and deciding what to trust	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

11.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What counts as digital information?	This unit introduces learners to the different forms of digital information they may meet in everyday life. Examples may include online news, social media posts, health advice, public service notices, forwarded messages, videos, advertisements, comments and search results. The focus should be simple: not all digital content has the same purpose. Some content informs, some persuades, some entertains, some sells, some warns and some tries to influence behaviour.	Learners look at several short examples and identify what type of content each one is.
Unit 2: Facts, opinions, interpretations and narratives	This unit helps learners distinguish between different kinds of statements. A fact can be checked. An opinion expresses a view. An interpretation explains what something means. A narrative presents events as a story with a particular emphasis. The purpose is not to make learners memorise definitions. The purpose is to help them understand that online messages may mix facts, opinions and interpretation.	Learners mark short statements as fact, opinion or interpretation and identify what would be needed to check them.
Unit 3: Sources, authors, senders and credibility cues	This unit introduces simple credibility checking. Learners should distinguish between the original source, the author and the person who forwarded or shared the message. This is important because a message may come from a trusted friend or family member, but still originate from an unreliable source. Credibility cues may include source name, date, evidence, author information, transparency, official status, consistency with other reliable sources and absence of excessive emotional pressure.	Learners apply four questions to a sample message: Who created it? When was it published? What evidence is provided? Where else can I check it?
Unit 4: Headlines, framing and missing context	This unit helps learners understand how presentation influences interpretation. Headlines, images, word choice and omissions can shape how people understand information. Some headlines are designed to inform. Others are designed mainly to attract attention, provoke emotion or encourage clicking. The unit should avoid abstract media theory and use simple comparisons: two headlines about the same issue, two images with different captions or two posts that emphasise different parts of a story.	Learners compare two headlines and identify which words create emotion, urgency or judgement.
Unit 5: Comparing sources and deciding what to trust	This unit introduces comparison as a practical habit. Learners should not rely only on one message, one headline or one forwarded post when the issue is important. They should compare information with another reliable source, especially when the topic concerns health, money, public services, safety or civic issues. Comparison does not mean reading many sources for every small question. It means knowing when a topic is important enough to check again.	Learners compare two short sources about the same topic and decide what is similar, what is different and what still needs checking.

Unit 6: Module reflection, routine and assessment	The final unit consolidates the module. Learners practise the Personal Credibility Routine and apply it to one realistic example. They also complete a short quiz or equivalent assessment activity.	Learners choose one example and answer: Would I trust it, check it, wait, ignore it or ask someone for help? Why?
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11.7 Assessment

Assessment in this module should check whether learners can apply simple credibility judgement to realistic examples. It should not focus mainly on memorising definitions.

Assessment should focus on:

Assessment focus	Example evidence
Recognising content type	Learner identifies whether a message is news, opinion, advertisement, public notice, personal story or entertainment.
Distinguishing fact, opinion, interpretation and narrative	Learner marks statements as factual, opinion-based, interpretative or narrative-driven.
Checking source and context	Learner identifies missing source, date, evidence or background information.
Recognising framing	Learner notices emotional, selective or attention-seeking wording.
Comparing sources	Learner chooses a safer response after comparing two examples.
Applying a credibility routine	Learner uses a short checklist before deciding whether to trust or share.
Explaining checking to others	Learner chooses respectful advice for a peer who asks whether an unfamiliar source can be trusted.
Transferring the routine	Learner applies the same checking questions to a new or unfamiliar type of digital content.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the safest credibility check, identifying content type, selecting a reliable source cue or choosing what to do before sharing.
True/False	Checking basic understanding of facts, opinions, sources, headlines and credibility cues.
Gap Fill	Reinforcing key terms such as source, evidence, context, opinion, headline, framing or comparison.

Every answer includes feedback. Feedback explains why a response is safer or why a message needs checking.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it checks the source and date before trusting the message.”
Incorrect answer feedback	“This answer reacts too quickly. A safer step is to check who created the message and whether another reliable source confirms it.”

11.8 Learner routine: Personal Credibility Routine

At the end of the module, learners are introduced to a short routine they can use when they see emotional, urgent or surprising digital content.

Before trusting or sharing digital information, pause and ask:

Step	Question
Source	Who created or published this?
Purpose	Is it informing, persuading, selling, warning or provoking?
Evidence	What proof or support is provided?
Context	Is the date, situation or background clear?

Comparison	Can I check this with another reliable source?
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A shorter memory version may be used in learner-facing MOOC materials: **Source. Purpose. Evidence. Context. Compare.**

11.9 Tailored approach to the target group

This module should be taught with familiar examples and plain language. Learners should not be expected to analyse complex media systems at this stage. The goal is to build confidence in asking simple but useful questions.

Examples should be connected to everyday situations: a forwarded health message, a local public service notice, a social media headline, an advertisement, a post about pensions or benefits, a weather warning, a public transport update or a message shared in a family group.

MOOC materials and facilitators should avoid shaming learners for having trusted or shared unreliable information in the past. Many misleading messages are designed to look believable. The learning focus should be: “What can I check next time?”

The module should also acknowledge that personal experience can be valuable. Older learners often recognise exaggeration, social pressure or unreliable claims because they have seen similar patterns before in other contexts. At the same time, personal experience is combined with source checking and comparison, especially when information concerns health, money, safety, public services or civic issues.

11.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Personal Credibility Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on facts, opinions, sources, evidence, framing and comparison.
Applied the credibility routine	Use of the Personal Credibility Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal use	Short reflection on one situation in which the learner checks before trusting or sharing.

11.11 Link to the next module

This module helps learners build the basic habit of checking information. Module 2 builds on this foundation by focusing on disinformation, manipulation and emotional pressure. Learners will move from asking “Can I trust this information?” to asking “Is this message trying to mislead or manipulate me?”

12. Module 2: Disinformation and manipulation awareness

12.1 Module summary

Element	Description
Module title	Disinformation and Manipulation Awareness
Indicative workload	7.5 hours
Main focus	Recognising misleading content, emotional pressure, manipulation strategies and disinformation patterns
Main competency achieved in this module	The learner can recognise misleading or manipulative digital content, identify emotional pressure and choose a safer checking or response strategy before reacting to or sharing it.
Corresponding learning outcome cluster	Cluster 2: Disinformation and Manipulation Awareness
Main practical routine	Pause–Check–Compare Routine
Main assessment approach	Short quizzes, emotional-pressure scenarios, manipulation-pattern recognition tasks and safer-response decisions

12.2 Module context

Module 1 introduced learners to source checking, credibility and framing. Module 2 builds on that foundation by focusing on misleading and manipulative content. Older adults may encounter disinformation through social media posts, forwarded messages, online videos, dramatic headlines, health claims, political content, crisis-related rumours, scam-like warnings or emotionally charged messages shared by people they trust.

Disinformation and manipulation are not always easy to recognise. Misleading content often looks familiar, urgent, moral, patriotic, helpful or emotionally convincing. It may use real facts in a distorted way, omit important context, exaggerate danger, misuse images, imitate trusted voices or ask people to share before checking. This is why learners need more than definitions. They need practical judgement strategies.

The purpose of this module is not to make learners suspicious of all information. It is to help them notice warning signs: strong emotion, urgency, unclear source, missing evidence, simplified blame, “share immediately” language, false authority or claims that are too neat, too frightening or too convenient. The module also supports respectful response. Learners learn not only how to protect themselves, but also how to avoid spreading misleading content further.

This module is taught carefully and without blame. Many misleading messages are designed to look believable. Anyone can be influenced by emotional pressure, especially when the message relates to health, safety, family, money, community, politics or personal identity. The learning focus should be practical: “What can I notice, check and do next time?”

12.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
Is this message trying to make me react quickly?	Helps learners notice urgency and pressure.
What emotion does this message create in me?	Supports recognition of fear, anger, guilt, shock or strong agreement.
Who created the message, not only who sent it to me?	Distinguishes trusted sender from original source.
What evidence is provided?	Encourages checking instead of reacting.
What information may be missing?	Supports attention to context and omissions.

Is this false information shared by mistake or deliberate manipulation?	Introduces the practical difference between misinformation and disinformation.
What does this message want me to do?	Helps identify behavioural pressure: click, share, donate, vote, buy, fear or distrust.
Could this message harm someone if I share it?	Connects media judgement with responsibility.
How can I check this without feeling overwhelmed?	Supports manageable verification routines.
How can I respond calmly if someone else shares misleading content?	Supports respectful peer communication.

12.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise emotionally charged language used to influence audiences.	I can notice words or images that try to make me feel fear, anger, shock, guilt or urgency.	Learner identifies emotional language in a short message or headline.
2. Identify obvious misinformation examples with guidance.	I can recognise clear examples of false or misleading information when I am shown simple warning signs.	Learner selects which example is misleading and explains one reason.
3. Explain why certain misleading messages appear believable.	I can explain why a message may look convincing even when it is incomplete or false.	Learner identifies features such as familiar sender, official-looking design, partial truth, emotional story or repeated sharing.
4. Distinguish misinformation from deliberate disinformation.	I can understand the difference between false information shared by mistake and false information used to mislead people on purpose.	Learner classifies simple scenarios as misinformation or disinformation.
5. Identify recurring manipulation patterns in political or social media content.	I can recognise common patterns such as fear, blame, false authority, “us versus them” language, urgency or selective evidence.	Learner matches examples with manipulation patterns.
6. Analyse emotional triggers used in misleading campaigns.	I can notice which emotions a misleading message uses and why those emotions may influence people.	Learner explains whether a message uses fear, anger, pride, shame, guilt or shock.
7. Evaluate motives behind manipulative content creation.	I can think about why someone might create or spread manipulative content.	Learner selects possible motives such as money, influence, attention, political gain, social division or fraud.
8. Apply judgement strategies to ambiguous or borderline cases.	I can decide what to do when I am not sure whether a message is reliable or misleading.	Learner chooses a safer action: pause, check, compare, wait, ignore or ask for help.
9. Support peers in identifying manipulation in real-world examples.	I can help another person check a suspicious message in a calm and respectful way.	Learner chooses respectful advice for a peer who wants to share questionable content.
10. Develop context-specific responses to emerging disinformation tactics.	I can adapt my checking routine to new types of misleading content, platforms or formats.	Learner applies the Pause–Check–Compare Routine to a new or unfamiliar example.

12.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What are misinformation, disinformation and manipulation?	1 hour
Unit 2	Emotional pressure and urgent messages	1 hour
Unit 3	Why misleading messages can look believable	1.25 hours
Unit 4	Common manipulation patterns	1.5 hours
Unit 5	Checking, responding and avoiding harmful sharing	1.5 hours
Unit 6	Module reflection, routine and assessment	1.25 hours
Total		7.5 hours

12.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What are misinformation, disinformation and manipulation?	This unit introduces the basic difference between misinformation and disinformation in simple language. Misinformation can be false or misleading information shared without the intention to harm. Disinformation is false or misleading information created or spread deliberately to deceive, influence or manipulate. The unit should avoid overloading learners with many categories. The practical distinction is enough: Was this shared by mistake, or is someone trying to mislead people on purpose?	Learners read three short scenarios and decide whether the problem is accidental false information, deliberate manipulation or unclear.
Unit 2: Emotional pressure and urgent messages	This unit helps learners notice how messages create pressure. Manipulative content often uses fear, anger, shock, guilt, pride or urgency. It may ask people to “share immediately”, “wake up”, “protect your family”, “do not trust anyone else” or “act before it is too late”. The unit should connect emotional reactions with a practical pause. Strong emotion is not proof that a message is false, but it is a sign to slow down and check.	Learners identify the main emotion in short examples and choose whether they should react immediately or pause and check.
Unit 3: Why misleading messages can look believable	This unit explains why misleading content can be convincing. It may contain some true information, use a familiar logo, be shared by a trusted person, include a dramatic image, refer to a real event, use official-sounding language or repeat something learners have already heard. The unit should help learners understand that being misled is not a personal failure. Misleading messages are often designed to exploit trust and familiarity.	Learners examine one believable-looking message and identify which details make it look trustworthy and which details still need checking.
Unit 4: Common manipulation patterns	This unit introduces recurring manipulation patterns in social and political media content. Examples may include simplified blame, “us versus them” framing, false authority, selective evidence, conspiracy-style claims, decontextualised images, emotional personal stories, urgent calls to share and claims that only one source tells the truth. The focus should remain practical: learners should recognise patterns, not memorise theory.	Learners match short messages with manipulation patterns such as fear, blame, false authority, urgency or missing context.
Unit 5: Checking, responding and avoiding harmful sharing	This unit connects recognition with action. Learners practise what to do before sharing or reacting: pause, check the original source, look for evidence, compare with another reliable source, wait if unsure, avoid forwarding under pressure and ask for help when needed. The unit should also include respectful peer response. If a friend or family member shares misleading content, learners can ask a calm checking question instead of starting an argument.	Learners choose the safest response to a forwarded message: share, ignore, check, ask for the source, compare with another source or respond respectfully.
Unit 6: Module reflection, routine and assessment	This final unit consolidates the Pause–Check–Compare Routine. Learners apply the routine to one realistic example and complete a short quiz or equivalent assessment activity. The unit should help learners connect this module with Module 1: source, evidence, context and comparison remain central.	Learners answer: What sign would make me stop before sharing a message? What source would I use to check it? What would I say if someone close to me shared it?

12.7 Assessment

Assessment in this module should check whether learners can recognise misleading or manipulative patterns and choose safer responses. It should not require complex theoretical definitions.

Assessment should focus on:

Assessment focus	Example evidence
Recognising misinformation and disinformation	Learner distinguishes accidental false information from deliberate manipulation in simple scenarios.
Identifying emotional pressure	Learner identifies fear, urgency, anger, guilt, pride or shock in a message.
Recognising manipulation signs	Learner notices missing source, unclear evidence, exaggerated wording, false authority, “share immediately” language or one-sided blame.
Explaining believability	Learner identifies why a misleading message may appear convincing.

Identifying motives	Learner recognises possible motives such as attention, profit, influence, fraud, political gain or social division.
Checking before sharing	Learner selects a safer action before forwarding or reacting.
Comparing information	Learner chooses to verify a claim through another reliable source.
Responding respectfully	Learner selects a calm correction, question or checking suggestion in a social situation.
Handling uncertainty	Learner chooses to wait, check or ask for help when the case is ambiguous.
Transferring the routine	Learner applies the Pause–Check–Compare Routine to a new type of message or platform.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the safest response, identifying emotional pressure, selecting the best checking step or recognising a manipulation pattern.
True/False	Checking basic understanding of misinformation, disinformation, urgency, manipulation and evidence.
Gap Fill	Reinforcing key terms such as misinformation, disinformation, source, evidence, urgency, emotion or manipulation.

Every answer includes feedback. Feedback explains why a response is safer, less safe, more reliable or more questionable.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it pauses before sharing and checks the claim with another reliable source.”
Incorrect answer feedback	“This answer reacts too quickly. Emotional or urgent messages should be checked before they are trusted or forwarded.”

12.8 Learner routine: Pause–Check–Compare Routine

At the end of the module, learners are introduced to a short routine they can use when they see emotional, urgent or surprising digital content.

Before reacting to or sharing a message, ask:

Step	Question
Pause	Is this message trying to make me react quickly?
Emotion	What feeling does it create in me?
Source	Who created the message, not only who sent it to me?
Evidence	What proof is provided?
Compare	Can I check this with another reliable source?
Respond	What is the safest and most responsible action now?

A shorter memory version may be used in learner-facing MOOC materials: **Pause. Notice emotion. Check source. Look for evidence. Compare. Respond carefully.**

12.9 Tailored approach to the target group

This module is taught without blame or embarrassment. Learners may have previously trusted or shared misleading content. The tone makes clear that misleading messages are often designed to look convincing and that everyone can be influenced by emotional pressure.

Examples are familiar and low-risk at first. Suitable examples include a forwarded health warning, a dramatic social media headline, a fake public notice, a misleading image caption, a rumour about public services, an exaggerated weather warning or a message asking people to “share immediately”. More sensitive political or social examples can be introduced gradually and must be selected carefully in national adaptations.

The module avoids overloading learners with many categories of information disorder. It is enough that learners understand the practical difference between false information shared by mistake and false information used to manipulate. The emphasis remains on noticing warning signs and choosing safer actions.

The module repeatedly connects with Module 1. The same basic checking questions remain useful: Who created this? What evidence is provided? What context is missing? Where else can I check it? Module 2 adds another layer: What emotion is this message using, and what does it want me to do?

Older learners are encouraged to use their experience as a strength. Many will recognise patterns of exaggeration, propaganda, rumours or social pressure from earlier media and social contexts. The module helps them transfer that judgement into digital environments without assuming that every new platform or format requires completely new thinking.

12.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Pause–Check–Compare Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on misinformation, disinformation, emotion, manipulation and evidence.
Recognised emotional pressure	Identification of fear, urgency, anger, guilt, pride or shock in a sample message.
Applied the routine	Use of the Pause–Check–Compare Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal use	Short reflection on one situation in which the learner pauses before reacting or sharing.

12.11 Link to the next module

This module helps learners recognise misleading content, emotional pressure and manipulation. Module 3 builds on this by focusing on AI-generated content. Learners will move from asking “Is this message trying to mislead or manipulate me?” to asking “Could this text, image, audio or video have been generated or altered by artificial intelligence, and how should I check it?”

13. Module 3: AI-generated content awareness

13.1 Module summary

Element	Description
Module title	AI-Generated Content Awareness
Indicative workload	7.5 hours
Main focus	Understanding AI-generated text, images, audio and video, recognising their risks and applying careful verification strategies
Main competency achieved in this module	The learner can recognise that digital content may be generated or altered by artificial intelligence and can critically assess AI-generated or AI-assisted content before trusting, using or sharing it.
Corresponding learning outcome cluster	Cluster 3: AI-Generated Content Awareness
Main practical routine	Check AI Content Carefully Routine
Main assessment approach	Short quizzes, AI-content recognition examples, verification scenarios, ethical-reflection prompts and safer-use decisions

13.2 Module context

Module 1 helped learners check sources and credibility. Module 2 helped them recognise misleading content and emotional manipulation. Module 3 adds a newer and increasingly important challenge: digital content may now be generated or altered by artificial intelligence.

Artificial intelligence is a broad term for computer systems designed to perform tasks that normally require some form of human intelligence, such as recognising patterns, producing text, analysing data, translating language, recommending content or generating images. Generative artificial intelligence is a type of AI that can create new content, such as text, images, audio, video, summaries, chatbot answers or synthetic voices.

For older learners, the most important issue is not how AI systems work technically. The key issue is that AI-generated content can look convincing. A text may sound confident. An image may look realistic. A voice may sound familiar. A video may appear authentic. A chatbot answer may look helpful. However, AI-generated content can be inaccurate, misleading, biased, outdated, emotionally manipulative or completely fabricated.

This does not mean that AI is only dangerous. AI tools can support learning, communication, translation, accessibility, creativity, public services and everyday tasks. The purpose of this module is not to create fear of AI. The purpose is to help learners understand that AI-generated content should be approached with careful judgement.

Older adults may encounter AI-generated content in social media posts, advertisements, online articles, fake images, synthetic voices, scam messages, automated customer support, chatbot answers, political communication, health information or videos shared by friends and family. They may not always know whether AI was involved. For this reason, the module focuses on practical awareness: pause, consider whether AI may have been used, check the source, look for evidence and avoid trusting content only because it looks realistic or sounds confident.

13.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
What is artificial intelligence in simple terms?	Gives learners a basic, non-technical understanding of AI.
What is generative AI?	Explains that AI can create text, images, audio, video and other content.
Could this content have been generated or altered by AI?	Encourages careful attention to digital content that looks unusually polished, dramatic or synthetic.
Does realistic-looking content always show something real?	Helps learners separate appearance from reliability.
Does confident-sounding text always mean accurate information?	Supports caution when reading AI-generated answers or summaries.
Who created, published or shared this content?	Connects AI awareness with source checking.
What evidence supports the content?	Reinforces verification rather than visual or emotional trust.
What could be the risk if I trust or share this?	Connects AI content with safety, misinformation and responsibility.
When should I ask for help or check another source?	Supports safe action under uncertainty.
How can AI be useful without becoming a source of blind trust?	Balances risk awareness with practical digital autonomy.

13.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise examples of AI-generated text or images.	I can recognise that some texts and images may have been created by artificial intelligence.	Learner identifies examples that may be AI-generated or AI-assisted.
2. Describe in simple terms how AI-generated content is produced.	I can explain that AI tools create new content by using patterns from large amounts of data.	Learner selects a simple explanation of how generative AI produces content.
3. Identify typical limitations of AI-generated media.	I can recognise that AI content may be inaccurate, incomplete, biased, outdated or invented.	Learner identifies possible limitations in a chatbot answer, AI image or generated text.
4. Distinguish AI-generated content from human-created content in common cases.	I can notice clues that content may be AI-generated, while understanding that it is not always possible to know for sure.	Learner compares two examples and identifies possible AI-content cues and uncertainty.
5. Explain risks of relying on AI-generated information without verification.	I can explain why I should not trust AI-generated information without checking it.	Learner selects risks such as false information, invented sources, scam use, fake images or misleading health advice.
6. Analyse ethical issues related to AI-generated media.	I can recognise ethical concerns such as deception, fake identity, manipulation, privacy, copyright or harm to reputation.	Learner identifies an ethical issue in a realistic AI-content scenario.
7. Assess trustworthiness of AI-assisted information sources.	I can judge whether AI-assisted information is supported by reliable sources and clear evidence.	Learner checks whether an AI-assisted answer includes sources, context, date and confirmation from reliable information.
8. Evaluate societal impact of AI-generated media on public discourse.	I can understand that AI-generated media can influence public debate, trust, elections, health decisions and social relationships.	Learner chooses possible consequences of AI-generated misinformation or synthetic media.
9. Guide others in responsible interpretation of AI-generated content.	I can help another person think carefully about AI-generated content without panic or blame.	Learner selects respectful advice for a peer who wants to share a suspicious AI-looking image or text.
10. Adapt critical strategies to new AI media developments.	I can use careful checking routines even when new AI tools or new types of content appear.	Learner applies the Check AI Content Carefully Routine to an unfamiliar AI-related example.

13.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What is AI and what is generative AI?	1 hour
Unit 2	AI-generated text, images, audio and video	1.25 hours
Unit 3	Why AI content can look convincing but still be unreliable	1.25 hours
Unit 4	Risks, scams and manipulation using AI-generated content	1.5 hours
Unit 5	Ethical questions and responsible interpretation	1.25 hours
Unit 6	Module reflection, routine and assessment	1.25 hours
Total		7.5 hours

13.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What is AI and what is generative AI?	This unit introduces artificial intelligence in simple language. AI can be explained as computer systems that perform tasks such as recognising patterns, recommending content, translating text, answering questions or creating new content. Generative AI should be introduced as AI that can produce text, images, audio, video and summaries. The unit should avoid technical details and focus on everyday examples: chatbots, automatic translation, voice assistants, recommendation systems and image generators.	Learners match everyday examples with simple AI uses, such as translation, recommendation, chatbot answer or generated image.
Unit 2: AI-generated text, images, audio and video	This unit helps learners understand that AI can generate different types of content. Text may include chatbot answers, fake articles, product reviews or social media posts. Images may show people, events or situations that never existed. Audio may imitate voices. Video may be edited or generated to create a false impression. The unit should stress that AI content may be difficult to detect and that uncertainty is normal.	Learners look at short examples and decide whether AI may have been used, what clues they notice and what still needs checking.
Unit 3: Why AI content can look convincing but still be unreliable	This unit explains a central risk: AI-generated content can be fluent, confident and realistic without being accurate. AI systems may invent details, present outdated information, repeat bias or omit important context. The unit should connect this with previous modules: source, evidence, context and comparison remain essential.	Learners read a confident-sounding AI-style answer and identify what information should be checked before trusting it.
Unit 4: Risks, scams and manipulation using AI-generated content	This unit introduces practical risks. AI can be used to create fake images, fake voices, misleading posts, personalised scam messages, false testimonials, fake advertisements or emotional manipulation. The unit should avoid sensationalism, but it should clearly show that AI can make misleading content more realistic and harder to recognise.	Learners choose the safest response to an AI-related scenario, such as a fake voice message, unrealistic advertisement, suspicious image or health claim.
Unit 5: Ethical questions and responsible interpretation	This unit helps learners think about ethical issues. AI-generated content can raise questions about deception, consent, privacy, authorship, manipulation, discrimination, reputation and responsibility. The unit should use simple scenarios: a fake image of a public figure, an AI-generated voice of a family member, a synthetic testimonial or an AI-made post shared as if it were real.	Learners identify what is ethically problematic in a scenario and choose a responsible action.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Check AI Content Carefully Routine. Learners apply it to one realistic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that learners do not need to become AI experts. They need practical questions that help them decide when to trust, check, wait or ask for help.	Learners apply the routine to one example and answer: What makes this content questionable? What should I check? What is the safest next step?

13.7 Assessment

Assessment in this module should check whether learners understand that AI can generate or alter digital content and whether they can apply careful judgement before trusting or sharing such content. It should not require technical explanations of AI systems.

Assessment should focus on:

Assessment focus	Example evidence
Basic understanding of AI and generative AI	Learner selects a simple explanation of AI and generative AI.
Recognition of AI-generated content types	Learner identifies that text, images, audio or video may be AI-generated or AI-assisted.
Understanding limitations	Learner recognises that AI content may be inaccurate, biased, outdated, incomplete or invented.
Noticing uncertainty	Learner understands that it is not always possible to know whether AI was used.
Checking before trusting	Learner chooses to verify AI-generated information with reliable sources.
Recognising scam and manipulation risks	Learner identifies possible AI use in fake messages, fake voices, fake images or suspicious advertisements.
Ethical awareness	Learner identifies concerns such as deception, privacy, fake identity or harm to reputation.
Public-discourse awareness	Learner recognises that AI-generated media may affect trust, civic debate, health decisions or social relationships.
Responsible peer support	Learner selects respectful advice for someone who wants to share suspicious AI-generated content.
Transfer of routine	Learner applies the checking routine to a new AI-related example.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the safest response, identifying AI-content risks, selecting what to verify or recognising possible ethical issues.
True/False	Checking basic understanding of AI, generative AI, realism, accuracy and verification.
Gap Fill	Reinforcing key terms such as artificial intelligence, generative AI, verification, source, evidence, synthetic voice or AI-generated image.

Every answer should include feedback. Feedback should avoid fear and shame. It should reinforce practical judgement.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because realistic-looking AI content should still be checked with a reliable source.”
Incorrect answer feedback	“This answer trusts the content too quickly. AI-generated text, images or voices can look convincing even when they are inaccurate or misleading.”

13.8 Learner routine: Check AI Content Carefully Routine

At the end of the module, learners should be introduced to a simple routine for AI-generated or AI-assisted content.

Before trusting or sharing content that may involve AI, ask:

Step	Question
Notice	Could this text, image, audio or video have been generated or altered by AI?
Source	Who published it, and where did it first appear?
Evidence	What proof supports the claim or image?
Context	Is the date, place, event or person clearly explained?
Compare	Can I confirm this with another reliable source?
Risk	What could happen if I trust or share this and it is false?
Action	Should I trust, check, wait, ignore, report or ask for help?

A shorter memory version may be used in learner-facing MOOC materials: **Notice AI. Check source. Look for evidence. Compare. Act carefully.**

13.9 Tailored approach to the target group

This module should be taught in calm and practical language. Learners do not need to understand machine learning, training data, neural networks or technical AI architecture. They need to understand that digital content can now be generated or altered in realistic ways and that appearance alone is not proof.

Examples should be carefully selected. They should show realistic situations without creating unnecessary fear. Suitable examples include an AI-generated image, a chatbot answer with missing sources, a fake product review, a synthetic voice warning, a suspicious health claim, an unrealistic advertisement or a social media post with an image that may not show a real event.

The module should balance risks and benefits. AI can be helpful for translation, accessibility, summarising information, writing support, navigation and learning. However, learners should understand that helpful does not mean automatically reliable. AI outputs should be checked when the decision is important, especially in health, finance, legal matters, public services, safety, elections or personal relationships.

The module should also acknowledge that recognising AI content is becoming difficult. Learners should not be expected to identify AI-generated content perfectly. The goal is not detection certainty, but better judgement under uncertainty. A learner can act safely even without knowing for sure whether AI was used.

The tone should avoid humiliation. Older learners may feel that AI is too new or too complex. The module should repeatedly reinforce that they do not need to become experts. They need a small set of practical questions that help them slow down, check and decide more safely.

13.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Check AI Content Carefully Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on AI, generative AI, AI-generated content, verification and risk.
Recognised possible AI-generated content	Identification of text, image, audio or video that may involve AI.
Understood limitations	Recognition that AI-generated content may be realistic but inaccurate, biased, incomplete or fabricated.
Applied the routine	Use of the Check AI Content Carefully Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal use	Short reflection on one situation in which the learner should check AI-generated or AI-assisted content before trusting or sharing it.

13.11 Link to the next module

This module helps learners understand that digital content may be generated or altered by artificial intelligence and should be checked carefully. Module 4 builds on this by focusing on algorithms and information exposure. Learners will move from asking “Could this content have been generated or altered by AI?” to asking “Why am I seeing this content, and how do platforms influence what appears in front of me?”

14. Module 4: Algorithmic awareness and information exposure

14.1 Module summary

Element	Description
Module title	Algorithmic Awareness and Information Exposure
Indicative workload	7.5 hours
Main focus	Recognising that platforms, feeds and recommendation systems influence what users repeatedly see online
Main competency achieved in this module	The learner can recognise that online platforms personalise and recommend content, understand how repeated exposure can shape perception, and apply simple strategies to broaden information exposure.
Corresponding learning outcome cluster	Cluster 4: Algorithmic Awareness and Information Exposure
Main practical routine	Information Diversity Routine
Main assessment approach	Short quizzes, feed-personalisation scenarios, repeated-exposure recognition tasks, comparison activities and information-diversity decisions

14.2 Module context

Older adults often use digital platforms to read news, watch videos, search for information, follow community updates, communicate with others or access public content. These platforms do not always show information in a neutral, complete or chronological order. They may select, rank or recommend content based on previous clicks, searches, views, likes, location, contacts, profile information, advertising systems or platform rules.

This means that two people may search for the same topic or use the same platform, but see different content. A learner may repeatedly see similar posts, videos, advertisements or opinions without noticing that the platform is shaping the information environment around them. Repetition can make a topic feel more important, more common or more believable than it really is.

This module introduces algorithmic awareness in simple language. Learners do not need to understand how algorithms are technically built. They need to understand that digital platforms can influence what they see, what they see often and what they may not see at all.

Module 4 builds on Modules 1–3. Learners have already practised checking credibility, recognising manipulation and interpreting AI-generated content. This module adds another question: not only “Can I trust this?” but also “Why am I seeing this, and what else might I not be seeing?”

The goal is not to make learners reject all digital platforms. Platforms can help people discover useful information, stay connected, receive updates and access services. The goal is to help learners understand that a feed, search result or recommendation list is not the whole digital world. It is a selected view. Important topics should therefore be checked beyond one platform, one feed or one recommendation.

14.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
Why do I keep seeing similar posts, videos or advertisements?	Introduces personalisation and repeated exposure.
Who decides what appears first in my feed, search results or recommendations?	Builds awareness that digital content is often ranked, selected or recommended.
Does the platform show me everything, or only selected content?	Supports understanding of filtered exposure.
Why do two people see different results for the same topic?	Helps learners understand personalisation and platform influence.
Could repeated content make something feel more common or more true?	Connects repetition with perception and trust.
Am I seeing different viewpoints or mostly similar ones?	Supports information diversity.
What is an information bubble?	Introduces the idea that repeated similar content can limit perspective.
When should I look beyond one feed, app or search result?	Encourages safer checking habits for important topics.
How can I broaden what I see online?	Connects awareness with practical action.
How can I explain this calmly to someone else?	Supports peer communication and transfer.

14.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise that platforms personalise content feeds.	I can understand that platforms may show me content based on my previous activity, profile or platform settings.	Learner identifies examples of personalised content in a feed, video list, search result or advertisement.
2. Describe how algorithms influence what content is shown.	I can explain in simple terms that digital systems help decide what appears first, what is recommended and what is repeated.	Learner completes a simple explanation or matching task about feeds, recommendations and ranking.
3. Identify signs of repeated or filtered information exposure.	I can notice when I keep seeing similar topics, opinions, videos or advertisements.	Learner identifies repeated exposure in a short scenario.
4. Explain how algorithms may reinforce existing viewpoints.	I can understand that seeing similar content often may strengthen what I already think or feel.	Learner selects the correct explanation in an example where a feed repeats similar views.
5. Compare personalised and non-personalised information sources.	I can compare a platform feed with another source, such as an official website, public service page or reliable media outlet.	Learner chooses a second source for comparison when a topic is important.
6. Analyse effects of algorithmic curation on public opinion.	I can recognise that repeated recommendations and selected content may influence how people understand public issues.	Learner explains how repeated posts or videos could influence views on a social or civic topic.
7. Evaluate risks of information bubbles for civic understanding.	I can understand that seeing only one kind of information may limit my view of public issues.	Learner reflects on why one feed or one source is not enough for important civic questions.
8. Apply strategies to diversify information exposure.	I can use simple steps to check different sources, viewpoints and contexts.	Learner applies the Information Diversity Routine to one topic.

9. Support peers in recognising algorithmic influence.	I can explain calmly to another person why feeds and recommendations may not show the whole picture.	Learner selects or writes a respectful explanation for a peer.
10. Develop adaptive approaches to algorithm-driven media ecosystems.	I can use information-diversity strategies when platforms, feeds or recommendation systems change.	Learner applies the routine to a new or unfamiliar platform situation.

14.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What are feeds, search results and recommendations?	1 hour
Unit 2	Personalisation: why different people see different content	1.25 hours
Unit 3	Repetition, ranking and information bubbles	1.5 hours
Unit 4	Algorithms, public opinion and civic understanding	1.25 hours
Unit 5	Broadening information exposure	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

14.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What are feeds, search results and recommendations?	This unit introduces the basic digital spaces where algorithmic selection appears. A feed is a stream of posts, updates or videos. Search results are ordered lists of information. Recommendations suggest what to watch, read, buy or follow next. The unit should use familiar examples: social media feed, video recommendations, shopping recommendations, news suggestions, search results or advertisements.	Learners match examples with terms such as feed, search result, recommendation, advertisement or suggested video.
Unit 2: Personalisation: why different people see different content	This unit explains personalisation in simple terms. Platforms may use previous clicks, watched videos, search history, location, contacts, age group, language, device use or advertising categories to decide what to show. Learners should understand that different people may see different information even when using the same platform.	Learners compare two fictional users and choose why each may be shown different posts, advertisements or video recommendations.
Unit 3: Repetition, ranking and information bubbles	This unit helps learners notice repeated exposure. If a learner clicks, watches or reacts to certain content, the platform may show more similar content. This can create an information bubble, where similar ideas, emotions or topics appear again and again. The unit should avoid technical detail and focus on practical recognition: “Am I seeing the same kind of content too often?”	Learners read a scenario in which a person keeps seeing similar posts and identify signs of repeated or filtered exposure.
Unit 4: Algorithms, public opinion and civic understanding	This unit connects algorithmic awareness with civic and social understanding. Repeated content can influence what people think is important, common, dangerous, popular or true. Algorithmic curation can affect how people understand public issues, health topics, local problems, elections, social conflicts or community debates. The aim is not to explain platform governance in depth, but to show why information diversity matters.	Learners choose how repeated posts about one public issue could influence a person’s opinion and what they should check next.
Unit 5: Broadening information exposure	This unit gives learners practical strategies. They can compare information with official websites, public institutions, reliable media, fact-checking organisations, community sources or another search engine. They can avoid relying on one feed, check dates and sources, open different types of sources, search deliberately instead of only scrolling and ask a trusted person or organisation when unsure.	Learners apply the Information Diversity Routine to one topic and choose at least two different sources for comparison.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the module. Learners apply the Information Diversity Routine to a realistic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that the goal is not to avoid platforms, but to avoid seeing one selected view as the whole picture.	Learners answer: Why might I be seeing this content? What else should I check? Which second source would give me a broader view?

14.7 Assessment

Assessment in this module should check whether learners understand that platforms influence information exposure and whether they can broaden what they see when a topic is important. It should not require technical knowledge about algorithm design.

Assessment should focus on:

Assessment focus	Example evidence
Recognising personalisation	Learner identifies that a feed, recommendation or advertisement may be personalised.
Understanding platform selection	Learner explains that platforms may rank, recommend or repeat content.
Identifying repeated exposure	Learner notices that a person keeps seeing similar topics, opinions, videos or advertisements.
Understanding reinforcement of viewpoints	Learner recognises that repeated similar content can strengthen existing beliefs or feelings.
Comparing sources	Learner selects a reliable second source beyond a feed or recommendation list.
Understanding civic effects	Learner recognises that selected exposure can affect public opinion or civic understanding.
Recognising information bubbles	Learner identifies risks of seeing only one kind of content.
Broadening exposure	Learner applies simple strategies to diversify information sources.
Supporting peers	Learner chooses a calm explanation for someone who believes their feed shows the full picture.
Transferring the routine	Learner applies information-diversity strategies to a new platform or unfamiliar recommendation system.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the best second source, identifying signs of personalisation, selecting safer information-diversity strategies or recognising repeated exposure.
True/False	Checking basic understanding of feeds, recommendations, personalisation, repetition and information bubbles.
Gap Fill	Reinforcing key terms such as feed, recommendation, personalisation, algorithm, repeated exposure, information bubble or comparison.

Every answer should include feedback. Feedback should reinforce the idea that platform content is selected and that important topics deserve comparison.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it does not rely only on one feed. It checks another source before forming an opinion.”
Incorrect answer feedback	“This answer assumes that the feed shows the whole picture. A platform may show selected or repeated content, so important topics should be checked elsewhere too.”

14.8 Learner routine: Information Diversity Routine

At the end of the module, learners should be introduced to a simple routine for broadening information exposure.

When a topic is important or keeps appearing repeatedly, ask:

Step	Question
Notice	Am I seeing this topic, opinion, video or advertisement again and again?
Source	Is this coming from one feed, one platform or one type of source?
Reason	Why might the platform be showing it to me?
Compare	What does another reliable source say?
Broaden	Can I check a different source, viewpoint, format or official page?
Decide	Do I have enough information to trust, share or form an opinion?

A shorter memory version may be used in learner-facing MOOC materials: **Notice repetition. Check source. Compare. Broaden. Decide carefully.**

14.9 Tailored approach to the target group

This module avoids technical explanations of algorithmic systems. Learners do not need to understand programming, data modelling or platform engineering. They need a practical understanding that digital platforms select, rank and repeat content.

Examples should be familiar: repeated advertisements for a product, video recommendations after watching one video, social media posts that keep showing similar opinions, news suggestions, search results that appear different for different users or local community posts that repeat one viewpoint.

The tone should avoid suggesting that platforms are always intentionally malicious. The main message is more balanced: platforms organise information for many reasons, including relevance, engagement, advertising and convenience, but the result may still narrow what learners see. Awareness helps learners use platforms more safely and critically.

The module should build confidence rather than suspicion. Learners should understand that they can take simple steps: check a second source, search deliberately, visit an official page, compare with reliable media, avoid relying only on recommendations and ask for help when a topic is important.

The module should also recognise older learners' previous experience with media. Many learners remember newspapers, television schedules, editors, advertisements and political messaging. This experience can help them understand that information has never been completely neutral. The new element is that digital platforms can personalise and repeat content individually, often without the user noticing.

14.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Information Diversity Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on feeds, recommendations, personalisation, repeated exposure and information bubbles.
Recognised platform influence	Identification of examples where platforms select, rank, recommend or repeat content.
Compared information exposure	Selection of another source or viewpoint beyond one feed or recommendation list.
Applied the routine	Use of the Information Diversity Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal use	Short reflection on one situation in which the learner should broaden information exposure before trusting or sharing.

14.11 Link to the next module

This module helps learners understand that platforms influence what they see and what they may not see. Module 5 builds on this by focusing on digital safety and scam awareness. Learners will move from asking “Why am I seeing this content?” to asking “Is this digital situation safe, and what should I do before clicking, replying, paying or sharing personal information?”

15. Module 5: Digital safety and scam awareness

15.1 Module summary

Element	Description
Module title	Digital Safety and Scam Awareness
Indicative workload	7.5 hours
Main focus	Identifying risky digital situations, scams, suspicious links, impersonation and pressure tactics
Main competency achieved in this module	The learner can recognise common digital scam warning signs and apply safer responses before clicking, replying, paying or sharing personal information.
Corresponding learning outcome cluster	Cluster 5: Digital Safety and Scam Awareness
Main practical routine	Stop–Check–Verify–Ask Routine
Main assessment approach	Short quizzes, scam-recognition scenarios, unsafe-request identification tasks, link-safety decisions and safer-response activities

15.2 Module context

Digital scams are a common risk in everyday online life. They may appear in emails, text messages, phone calls, messaging apps, social media posts, advertisements, fake websites or online forms. Some scams are easy to recognise. Others look professional, use familiar logos, imitate trusted institutions or create emotional pressure.

Older adults may be targeted because scammers expect them to be more trusting, more worried about official messages, more likely to respond to family-related emergencies or less familiar with changing digital fraud patterns. However, anyone can be affected by scams. The problem is not lack of intelligence. The problem is that scams are designed to create urgency, confusion, fear, guilt or hope before people have time to check.

This module helps learners recognise warning signs and practise safer responses. The aim is not to make learners afraid of digital services, but to help them act more calmly and confidently when they face suspicious messages, links, calls or requests.

Module 5 builds on the previous modules. Learners have already practised checking information, recognising manipulation, understanding AI-generated content and noticing how platforms shape what they see. In this module, they apply these habits to digital safety: “Is this message, link, call or request safe?”

The module emphasises practical safety. Learners do not need detailed technical knowledge of malware, phishing infrastructure or cybercrime methods. They need a clear routine: stop before acting, check the warning signs, verify through an official channel and ask for help when the situation involves money, passwords, codes, identity documents, health, public services or personal data.

15.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
Is this message, link, call or request safe?	Supports basic risk awareness.
Is someone asking me for personal data, money, passwords or verification codes?	Helps identify high-risk requests.
Is the message creating urgency, fear, guilt or hope?	Supports recognition of scam pressure tactics.
Is the sender really who they claim to be?	Builds awareness of impersonation and fake authority.
Should I click this link or open this attachment?	Supports safer digital behaviour.
Is this website or form asking for too much information?	Helps identify fake pages and unsafe data collection.
How can I verify the request through an official channel?	Connects safety with practical checking.
When should I stop immediately?	Supports recognition of high-risk situations.
Who can I ask for help without feeling ashamed?	Supports autonomy with support.
How can I help someone else respond safely to a suspected scam?	Supports peer safety and respectful advice.

15.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise common online scams and fraud attempts.	I can recognise typical scam situations in messages, emails, websites, advertisements, phone calls or social media.	Learner identifies scam signs in short examples.
2. Identify unsafe requests for personal information.	I can notice when someone asks for personal data, passwords, verification codes, bank details or identity documents in an unsafe way.	Learner marks risky requests in sample messages.
3. Apply basic protective actions when encountering suspicious content.	I can stop, avoid clicking, check the sender and verify through an official channel.	Learner chooses the safest response in a scenario.
4. Explain typical scam strategies targeting older adults.	I can understand that scams often use fear, urgency, fake authority, emotional stories, family emergencies or promises.	Learner identifies the scam strategy used in an example.
5. Distinguish legitimate communication from fraudulent messages.	I can compare a suspicious message with official communication and notice warning signs.	Learner compares two examples and selects which one needs checking.
6. Analyse psychological techniques used in scam scenarios.	I can notice when a scam tries to make me feel afraid, rushed, guilty, hopeful, worried or excited.	Learner identifies emotional pressure in a scam message.
7. Evaluate risk levels in complex digital interactions.	I can recognise when a situation is low-risk, uncertain or high-risk.	Learner sorts examples by risk level.
8. Apply preventive strategies across platforms and devices.	I can use safety habits in email, SMS, messaging apps, websites, social media and phone calls.	Learner applies the Stop–Check–Verify–Ask Routine to one example.
9. Guide others in responding safely to suspected scams.	I can calmly suggest a safer step to someone who receives a suspicious message or call.	Learner selects or writes a respectful safety response.
10. Adapt safety strategies to new digital threat patterns.	I can use the same safety routine when scams appear in new formats, platforms or technologies.	Learner applies the routine to an unfamiliar scam-like example.

15.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What is a digital scam?	1 hour
Unit 2	Warning signs: pressure, urgency and unsafe requests	1.25 hours
Unit 3	Suspicious links, attachments and fake websites	1.5 hours
Unit 4	Impersonation and fake authority	1.25 hours
Unit 5	Safer responses and verification channels	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

15.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What is a digital scam?	This unit introduces digital scams as dishonest attempts to trick people into giving money, personal data, passwords, verification codes, identity documents or access to accounts. Scams may appear through different channels: email, SMS, phone calls, messaging apps, social media, advertisements, websites or online forms. Learners should understand that scams are not always obvious. They may look official and may use familiar logos, names, topics or personal details. Caution is reasonable, especially when a message asks for quick action.	Learners look at several short examples and decide which ones seem safe, uncertain or suspicious.
Unit 2: Warning signs: pressure, urgency and unsafe requests	This unit focuses on common warning signs. These include urgent deadlines, threats, promises of money or prizes, requests for personal data, requests for passwords or codes, unusual payment requests, emotional stories, family-emergency claims and instructions not to tell anyone. Learners should practise recognising pressure. A message that says “act now”, “your account will be blocked”, “pay immediately”, “send this code” or “do not ignore this” should be treated carefully.	Learners underline or select words and phrases that create pressure in sample messages.
Unit 3: Suspicious links, attachments and fake websites	This unit introduces risky links, attachments and fake websites. Learners should understand that clicking a link may lead to a fake page, data theft, malware or a payment scam. Attachments may also be unsafe, especially when they come unexpectedly. The unit should avoid technical overload. Learners need practical rules: do not click under pressure, check the sender, avoid entering personal data through suspicious links and access important services through official websites or known apps.	Learners decide whether to click, ignore, verify or ask for help in different link-related scenarios.
Unit 4: Impersonation and fake authority	This unit explains impersonation. Scammers may pretend to be banks, delivery services, public institutions, police, tax offices, health services, technical support, family members, friends or well-known companies. The key point is that a familiar name, logo or phone number does not prove that a message is real. Learners should verify through an official channel, not through the link, attachment or phone number provided in the suspicious message.	Learners compare a suspicious message with what an official message would normally include and identify what should be checked.
Unit 5: Safer responses and verification channels	This unit teaches safer actions. Learners should stop, avoid clicking, avoid replying with personal data, avoid sharing codes, check official contact information, compare with previous legitimate communication and ask a trusted person or organisation for support. The unit should include the idea that asking for help is a responsible safety strategy, not a failure. High-risk situations involving money, identity documents, passwords, banking, health or public services deserve extra caution.	Learners choose the safest response to a suspicious banking message, delivery message, fake public service notice, family-emergency message or suspicious call.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Stop–Check–Verify–Ask Routine. Learners apply the routine to one realistic example and complete a short quiz or equivalent assessment activity. This unit should reinforce calm action: do not panic, do not click, do not pay, do not share personal data, verify safely and ask for help when needed.	Learners answer: What kind of message would make me stop immediately? Who or what could I use to verify it safely?

15.7 Assessment

Assessment in this module should check whether learners can recognise common scam signs and choose safer responses. It should focus on practical safety behaviour, not technical cybersecurity knowledge.

Assessment should focus on:

Assessment focus	Example evidence
Recognising scam signs	Learner identifies urgency, threats, fake prizes, suspicious links, unsafe requests or emotional pressure.
Identifying high-risk data requests	Learner recognises requests for passwords, verification codes, bank data, identity documents or sensitive personal information.
Avoiding unsafe action	Learner chooses not to click, pay, reply or share data under pressure.
Recognising suspicious links and attachments	Learner identifies when a link or attachment needs verification before opening.
Recognising fake websites or forms	Learner notices that a page asks for too much information or does not clearly match an official service.
Recognising impersonation	Learner identifies fake authority, fake family emergency, fake bank, fake delivery service or fake public institution.
Verifying through official channels	Learner chooses to use an official website, known app, previous official contact or trusted support person.
Evaluating risk level	Learner sorts situations into safe, uncertain and high-risk categories.
Supporting peers	Learner selects calm advice for another person who receives a suspicious message.
Transferring the routine	Learner applies the Stop–Check–Verify–Ask Routine to a new scam format or platform.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the safest response, identifying scam signs, selecting a verification channel or recognising high-risk requests.
True/False	Checking basic understanding of links, attachments, codes, personal data, urgency and impersonation.
Gap Fill	Reinforcing key terms such as scam, verification code, password, official channel, suspicious link, impersonation or pressure.

Every answer should include feedback. Feedback should be clear and non-shaming.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it does not use the suspicious link. It verifies the message through an official channel.”
Incorrect answer feedback	“This answer is risky because it reacts under pressure. A safer step is to stop, avoid clicking and check the request through an official contact.”

15.8 Learner routine: Stop–Check–Verify–Ask Routine

At the end of the module, learners should be introduced to a short routine for suspicious messages, links, calls or requests.

Before clicking, replying, paying or sharing personal data, ask:

Step	Question
Stop	Is this message asking me to act quickly?
Check	Is it asking for money, passwords, codes, documents or personal data?
Sender	Is the sender really who they claim to be?
Link	Do I need to avoid this link and go to the official website or app myself?
Verify	Can I confirm this through an official channel I already know?
Ask	Should I ask a trusted person or organisation before doing anything?

A shorter memory version may be used in learner-facing MOOC materials: **Stop. Check. Verify. Ask.**

15.9 Tailored approach to the target group

This module is taught with calm, practical and non-shaming language. Learners should not be made to feel foolish if they have previously clicked a suspicious link, answered a scam call or trusted a message that later proved false. Scams are designed to create pressure and confusion. The learning goal is to build safer habits for the next situation.

Examples should be familiar and locally adaptable. Suitable examples include fake bank messages, delivery notifications, public service messages, fake technical support, prize scams, fake health products, family-emergency messages, fake charity requests, pension-related scams, tax-related messages or suspicious login alerts. National adaptations must use realistic examples from the relevant country, but must avoid using real personal data.

The module avoids technical overload. Terms such as phishing, malware or two-factor authentication may appear, but they should be explained through practical meaning. Learners need to know what to do: do not click under pressure, do not share codes, do not enter data through suspicious links, verify through official channels and ask for help when needed.

The module reinforces that asking for help is part of digital autonomy. Autonomy does not mean solving every safety problem alone. It means knowing when to stop, when to verify and when to involve a trusted person, bank, public institution, family member, educator, support service or official contact.

The module also connects digital safety with emotional safety. Scam messages often use fear, shame, urgency, loneliness, hope or family concern. Learners are encouraged to notice emotional pressure as a safety warning sign.

15.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Stop–Check–Verify–Ask Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on scams, unsafe requests, suspicious links, fake websites, impersonation and verification.
Recognised scam warning signs	Identification of urgency, threats, fake authority, suspicious links or unsafe requests in sample messages.
Evaluated risk level	Sorting of situations into safe, uncertain and high-risk categories.
Applied the routine	Use of the Stop–Check–Verify–Ask Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal safety practice	Short reflection on one situation in which the learner should stop before clicking, replying, paying or sharing personal data.

15.11 Link to the next module

This module helps learners recognise digital scams and choose safer responses before clicking, replying, paying or sharing personal information. Module 6 builds on this by focusing on privacy and data protection. Learners will move from asking “Is this message, link or request safe?” to asking “What personal data am I sharing, who can see it and what choices do I have?”

16. Module 6: Privacy and data protection

16.1 Module summary

Element	Description
Module title	Privacy and Data Protection
Indicative workload	7.5 hours
Main focus	Understanding personal data, careful sharing, digital footprints and basic privacy protection
Main competency achieved in this module	The learner can recognise personal data, make informed privacy choices and apply basic data-protection strategies in everyday digital situations.
Corresponding learning outcome cluster	Cluster 6: Privacy and Data Protection
Main practical routine	Personal Data Protection Routine
Main assessment approach	Short quizzes, privacy-decision scenarios, personal-data recognition tasks, visibility checks and safer-sharing decisions

16.2 Module context

Older adults often use digital services that ask for personal information: public service portals, health platforms, banking services, online shops, social media, messaging apps, newsletters, loyalty cards, online forms and mobile applications. Some data sharing is necessary and useful. Some is optional. Some may be risky.

Privacy and data protection can sound technical or legal, but in everyday life they often begin with simple questions: What am I being asked to share? Why is it needed? Who will see it? What could happen if it is misused? Do I feel comfortable sharing it?

This module helps learners understand personal data and make more informed privacy choices. It does not aim to turn learners into data protection experts. It supports practical judgement: recognising sensitive information, avoiding unnecessary sharing, checking privacy settings where possible and asking for help before sharing high-risk data.

Module 6 builds on Module 5. Learners have already practised recognising unsafe requests in scams. This module broadens the focus from suspicious messages to everyday privacy decisions in normal digital use. A service may be legitimate and still ask for more information than the learner wants to share. A platform may be useful and still make some information visible to others. A form may be necessary and still require careful attention.

The aim is not to tell learners never to share data. Many digital services require some information to function. The aim is informed choice: share only what is necessary, with trusted services, through safe channels and with awareness of visibility, purpose and risk.

16.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
What counts as personal data?	Helps learners recognise information that identifies them or reveals something about them.
What information is more sensitive or higher-risk?	Supports caution with passwords, codes, bank details, health information, identity documents and location.
Is this information necessary to share?	Supports careful decision-making before filling forms, using services or posting online.
Who can see what I share?	Builds awareness of audience, visibility and privacy settings.
Why is this service asking for my data?	Encourages attention to purpose and proportionality.
What is my digital footprint?	Supports awareness that online actions can leave traces.
Can I change privacy settings?	Introduces basic control options.
Can I share less information?	Supports data-minimisation habits in everyday language.
What is the trade-off between convenience and privacy?	Helps learners understand that some services are useful but still require careful choices.
When should I ask for help before sharing data?	Supports autonomy with support in high-risk situations.

16.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Identify personal data commonly shared online.	I can recognise information such as my name, address, phone number, photo, location, health information, bank details or ID number as personal data.	Learner identifies personal data in short examples, forms, posts or messages.
2. Recognise privacy settings on common platforms.	I can understand that some digital services have settings that control who can see my information.	Learner identifies examples of privacy settings or visibility options.
3. Adjust basic privacy options with guidance.	I can change simple privacy options when instructions or support are provided.	Learner completes or describes a basic guided privacy action, such as changing visibility or reviewing permissions.
4. Explain consequences of oversharing personal information.	I can understand that sharing too much information may create risks for privacy, safety, identity misuse or unwanted contact.	Learner explains one possible consequence of oversharing in a realistic scenario.
5. Apply privacy decisions aligned with personal comfort levels.	I can decide what I am comfortable sharing and what I prefer to keep private.	Learner chooses a safer or more comfortable sharing option in a scenario.
6. Analyse data-use practices of digital services.	I can think about why a service asks for certain data and whether the request seems necessary.	Learner identifies whether a data request is necessary, optional, unclear or excessive.
7. Evaluate trade-offs between convenience and data protection.	I can recognise that some digital services are useful but may require privacy choices.	Learner compares convenience and privacy in examples such as location sharing, online shopping or app permissions.
8. Apply privacy strategies across multiple digital environments.	I can use privacy habits in forms, apps, messages, websites, social media and online services.	Learner applies the Personal Data Protection Routine to one digital situation.
9. Support peers in making informed privacy choices.	I can explain a simple privacy decision to another person in a calm and respectful way.	Learner selects or writes respectful advice for a peer who is unsure about sharing personal data.
10. Adapt data-protection strategies to evolving digital services.	I can use the same privacy questions when new services, apps or platforms appear.	Learner applies the routine to an unfamiliar app, service, form or digital request.

16.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	What is personal data?	1 hour
Unit 2	Sensitive data, oversharing and digital footprints	1.25 hours
Unit 3	Visibility, privacy settings and audience	1.25 hours
Unit 4	Forms, apps, permissions and data requests	1.5 hours
Unit 5	Convenience, privacy choices and safer sharing	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

16.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: What is personal data?	This unit introduces personal data in everyday language. Personal data is information that can identify a person or say something about them. Examples include name, address, phone number, email, photo, location, date of birth, identity number, bank information, health information, family details and online profile information. The unit should use concrete examples and avoid legal complexity.	Learners look at a list of information and mark which items are personal data.
Unit 2: Sensitive data, oversharing and digital footprints	This unit explains that some personal data is more sensitive or higher-risk. Passwords, verification codes, bank details, health information, identity documents and exact location require extra caution. The unit also introduces the digital footprint: online actions, posts, comments, photos, searches, profiles or account activity may leave traces. Learners should understand that oversharing can create risks even when there is no obvious scam.	Learners identify which information should never be shared through an unknown message or link and which information may require careful checking.
Unit 3: Visibility, privacy settings and audience	This unit helps learners understand who can see what they share. A post, photo, profile detail or comment may be visible to everyone, only contacts, a selected group or only the user. Privacy settings can help control visibility, although settings differ between platforms and may change. Learners should not be expected to master every platform setting, but they should understand that visibility matters and can often be adjusted.	Learners choose a suitable visibility option for different examples: public post, family photo, personal profile detail or group message.
Unit 4: Forms, apps, permissions and data requests	This unit focuses on everyday data requests. Online forms, apps and services may ask for information, access to location, camera, microphone, contacts, photos or notifications. Some requests are necessary for the service to work. Others may be optional or excessive. Learners should ask: Why is this needed? Can I continue without sharing it? Is this a trusted service? What happens if I refuse?	Learners compare several app or form requests and decide which are necessary, optional, unclear or risky.
Unit 5: Convenience, privacy choices and safer sharing	This unit explains privacy trade-offs. Some services are convenient because they remember details, personalise content, save addresses, use location or connect accounts. These features may be useful, but they also require choices about personal data. Learners should not be told never to share data. Instead, they should learn to ask whether the request is necessary, proportionate and trustworthy.	Learners compare two situations: one where sharing data is necessary for a service, and one where sharing data is optional or risky.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Personal Data Protection Routine. Learners apply the routine to one realistic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that privacy is not only about rules. It is about informed control over personal information.	Learners answer: What type of personal information would I never share through a message or unknown link? What information would I check before sharing?

16.7 Assessment

Assessment in this module should check whether learners can recognise personal data, understand basic privacy risks and make safer sharing decisions. It should not assess legal knowledge of data protection regulations.

Assessment should focus on:

Assessment focus	Example evidence
Recognising personal data	Learner identifies examples of personal data in forms, posts, profiles or messages.
Recognising sensitive data	Learner identifies higher-risk information such as passwords, codes, bank details, identity documents, location or health information.
Avoiding oversharing	Learner chooses not to share unnecessary personal information.
Understanding digital footprints	Learner recognises that posts, comments, photos, searches or account activity may leave traces.
Understanding visibility	Learner recognises who may see a post, profile detail, shared photo or group message.
Using privacy settings	Learner identifies a suitable setting, visibility option or control with guidance.
Evaluating data requests	Learner distinguishes necessary data sharing from optional, unclear or excessive data sharing.
Evaluating privacy trade-offs	Learner recognises the balance between convenience and data protection.
Supporting peers	Learner selects respectful advice for someone unsure about sharing data or changing privacy settings.
Transferring the routine	Learner applies the Personal Data Protection Routine to a new app, platform, form or service.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the safest data-sharing decision, identifying sensitive information, selecting a visibility option or choosing whether to continue with a data request.
True/False	Checking basic understanding of personal data, privacy settings, oversharing, visibility and digital footprints.
Gap Fill	Reinforcing key terms such as personal data, privacy, digital footprint, settings, consent, visibility, permission or sensitive data.

Every answer should include feedback. Feedback should explain why a sharing decision is safer or why certain data requires more caution.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it avoids sharing sensitive personal data through an uncertain channel.”
Incorrect answer feedback	“This answer shares too much information. A safer step is to check whether the data is really needed and who will be able to see it.”

16.8 Learner routine: Personal Data Protection Routine

At the end of the module, learners should be introduced to a short routine they can use before sharing personal information.

Before sharing personal data, ask:

Step	Question
What	What information am I being asked to share?
Why	Why is this information needed?
Who	Who will receive it or be able to see it?
Risk	Could this information harm me if misused?
Choice	Can I share less, change settings, refuse or ask for help first?

A shorter memory version may be used in learner-facing MOOC materials: **What. Why. Who. Risk. Choice.**

16.9 Tailored approach to the target group

This module should use practical examples rather than legal explanations. Privacy should be presented as everyday control over personal information, not as an abstract regulation. Learners should understand that privacy is about making informed choices: what to share, with whom, for what purpose and under what conditions.

Suitable examples include online forms, social media profiles, family photos, location sharing, health portals, public service accounts, online shopping, banking apps, messaging groups, app permissions, loyalty cards, newsletters and profile settings.

The module should avoid creating the impression that all data sharing is dangerous. Many digital services require some information to function. The key learning point is informed choice: share only what is necessary, with trusted services, through safe channels and with awareness of visibility.

The module should also recognise that older adults may depend on family members or trusted people for digital support. This can be helpful, but learners should still understand what is being shared on their behalf whenever possible. Support should increase autonomy, not replace it.

Privacy settings should be introduced carefully. Interfaces change often, and learners may use different devices or platforms. The module should therefore focus on stable questions and principles, not only on screenshots or step-by-step instructions that may quickly become outdated.

Learners should be encouraged to define personal comfort levels. Some people are comfortable sharing photos or using location services; others are not. The goal is not one identical rule for everyone, but informed and safer decision-making.

16.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Personal Data Protection Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on personal data, sensitive data, digital footprints, visibility and privacy settings.
Recognised privacy risks	Identification of oversharing, unsafe visibility, unnecessary data requests or sensitive information in at least one example.
Evaluated a data-sharing decision	Choice of a safer or more appropriate sharing option in a form, app, platform or message scenario.
Applied the routine	Use of the Personal Data Protection Routine on one form, post, message, app or scenario.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal privacy habits	Short reflection on one privacy setting or sharing habit the learner may want to review.

16.11 Link to the next module

This module helps learners make safer decisions about personal data and privacy. Module 7 builds on this by focusing on digital well-being and emotional resilience. Learners will move from asking “What personal information should I protect?” to asking “How does digital life affect my mood, stress, confidence and sense of control?”

17. Module 7: Digital well-being and emotional resilience

17.1 Module summary

Element	Description
Module title	Digital Well-being and Emotional Resilience
Indicative workload	7.5 hours
Main focus	Managing digital overload, emotional reactions, uncertainty, stress and fear in online environments
Main competency achieved in this module	The learner can recognise how digital content and online interactions affect mood, stress and confidence, and can apply simple self-regulation strategies to maintain healthier digital habits.
Corresponding learning outcome cluster	Cluster 7: Digital Well-being and Emotional Resilience
Main practical routine	Pause for Digital Well-being Routine
Main assessment approach	Short quizzes, emotional-awareness scenarios, overload-recognition tasks, self-regulation decisions and reflection prompts

17.2 Module context

Digital life can be useful, informative and socially meaningful. It can help older adults communicate with family and friends, follow news, access services, learn new things and participate in community life. At the same time, digital environments can also create stress, confusion, fatigue, fear or pressure.

Older learners may feel overwhelmed by too many messages, notifications, warnings, news updates, scams, advertisements or conflicting claims. Emotional content can influence how people think and act. A frightening headline, an urgent warning, a dramatic image, a scam message or an angry online discussion may make someone react quickly before checking carefully.

This module helps learners recognise how digital media can affect their well-being. It does not present digital life only as a problem. Instead, it supports a balanced approach: learners should be able to use digital tools in ways that are useful, safe and manageable.

Module 7 builds on previous modules. Learners have already practised checking information, recognising manipulation, understanding AI-generated content, noticing algorithmic exposure, avoiding scams and protecting personal data. This module adds a personal question: How does digital life affect my mood, stress, confidence and sense of control?

The module should not be presented as psychological therapy or health counselling. It is a practical digital resilience module. It helps learners notice emotional reactions, reduce digital overload, avoid rushed reactions and build small habits that support calmer and more intentional digital participation.

17.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
How do I feel after reading, watching or sharing digital content?	Supports emotional awareness.
Is this content making me feel afraid, angry, rushed or helpless?	Helps recognise emotional pressure and manipulation.
Am I receiving too many messages, warnings or notifications?	Supports awareness of digital overload.
Do I feel more informed or more confused after using a digital service?	Encourages reflection on usefulness and clarity.
Am I reacting because I have checked the content, or because I feel pressured?	Connects emotional awareness with safer decision-making.

Does my online activity help me feel connected, or does it make me feel tired or anxious?	Supports balanced digital habits.
When should I take a break from digital content?	Supports self-regulation.
Which digital habits support my well-being?	Encourages positive and intentional use.
What can I do when online content feels overwhelming?	Supports practical coping strategies.
Who can I ask for help when digital situations feel stressful?	Supports autonomy with support.

17.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise emotional responses triggered by digital media.	I can notice when online content makes me feel afraid, angry, stressed, hopeful, pressured or confused.	Learner identifies emotions connected to short digital examples.
2. Identify signs of digital overload or stress.	I can recognise when there are too many messages, notifications, warnings or pieces of information at once.	Learner identifies overload signs in a scenario.
3. Apply simple strategies to manage online engagement.	I can pause, take a break, reduce notifications, check later or ask for help when digital content becomes stressful.	Learner chooses a suitable well-being strategy in an example.
4. Explain how media consumption affects mood and confidence.	I can understand that what I read, watch or follow online may affect how I feel and how confident I am.	Learner completes a short reflection prompt.
5. Balance online and offline activities intentionally.	I can decide when digital tools are useful and when it is better to rest, talk to someone or do something offline.	Learner selects a balanced response in a scenario.
6. Analyse long-term effects of digital media habits.	I can recognise that repeated alarming, negative or stressful content may affect my habits, expectations and sense of control.	Learner identifies a repeated habit that may increase stress or confusion.
7. Evaluate emotional manipulation in digital environments.	I can notice when content uses emotion to make me react quickly.	Learner identifies emotional manipulation in a short message.
8. Apply self-regulation strategies across platforms.	I can use simple well-being strategies in messaging apps, social media, news sites, video platforms and digital services.	Learner applies the Pause for Digital Well-being Routine to one example.
9. Support peers in maintaining healthy digital habits.	I can calmly suggest a break, a check or support when someone feels overwhelmed by digital content.	Learner selects or writes a respectful peer-support response.
10. Adapt well-being strategies to changing media landscapes.	I can use the same well-being routine when new platforms, message types or stressful digital situations appear.	Learner applies the routine to an unfamiliar or new digital situation.

17.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	Digital life, usefulness and pressure	1 hour
Unit 2	Emotional reactions to digital content	1.25 hours
Unit 3	Digital overload, notifications and stress	1.5 hours
Unit 4	Emotional manipulation and rushed reactions	1.25 hours
Unit 5	Healthy digital habits and self-regulation	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

17.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: Digital life, usefulness and pressure	This unit introduces digital well-being as a balanced relationship with digital tools and media. Digital tools can support communication, access to services, learning and participation. However, they can also create pressure when learners feel they must respond quickly, follow everything, understand every new service or manage too many messages. The unit should avoid presenting digital life as only harmful. The goal is to help learners distinguish useful engagement from stressful or excessive engagement.	Learners sort examples into “useful digital activity”, “stressful digital activity” and “uncertain or depends on the situation”.
Unit 2: Emotional reactions to digital content	This unit helps learners notice their emotional responses. Digital content may create fear, anger, sadness, hope, guilt, urgency, confusion or excitement. These emotions are not wrong. They are signals that can help learners pause and decide more carefully. The unit should connect with previous modules on manipulation, scams and AI-generated content. Strong emotion is often a reason to slow down before clicking, replying or sharing.	Learners identify the main emotion created by short examples such as a dramatic headline, urgent message, angry comment thread or alarming video preview.
Unit 3: Digital overload, notifications and stress	This unit focuses on overload. Too many notifications, open tabs, messages, warnings, advertisements, news updates or contradictory claims can make learners feel tired or confused. The unit should introduce simple strategies: turn off non-essential notifications, check messages at chosen times, take breaks, save important information for later, avoid endless scrolling and ask for help when digital tasks become too much.	Learners choose a practical strategy for different overload situations, such as too many messages, repeated notifications or confusing information.
Unit 4: Emotional manipulation and rushed reactions	This unit connects well-being with critical judgement. Emotional manipulation can make people react before checking. Content may use fear, anger, guilt, urgency or helplessness to push learners into sharing, clicking, donating, replying or arguing. The unit should reinforce that pausing is not weakness. It is a digital resilience strategy.	Learners examine a short emotional message and choose whether to react immediately, pause, check, compare, ask for help or take a break.
Unit 5: Healthy digital habits and self-regulation	This unit supports intentional digital use. Healthy digital habits may include planned breaks, checking trusted sources instead of scrolling, limiting stressful notifications, balancing online and offline activities, avoiding late-night alarming content, talking to someone when worried and using digital tools for connection and learning. The unit should invite learners to define habits that fit their own lives.	Learners select two digital habits they want to keep, reduce or change and explain why.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Pause for Digital Well-being Routine. Learners apply the routine to one realistic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that digital well-being is part of digital autonomy: learners can decide when to engage, when to stop, when to check and when to ask for support.	Learners answer: What online situation makes me feel rushed or overwhelmed? What will I do next time before reacting?

17.7 Assessment

Assessment in this module should check whether learners can recognise emotional pressure, digital overload and suitable self-regulation strategies. It should not assess medical, psychological or therapeutic knowledge.

Assessment should focus on:

Assessment focus	Example evidence
Recognising emotional responses	Learner identifies emotions such as fear, anger, stress, hope, guilt, urgency or confusion in digital examples.
Recognising overload	Learner identifies signs of too many messages, notifications, warnings, contradictory claims or digital tasks.
Choosing self-regulation strategies	Learner selects appropriate actions such as pausing, taking a break, checking later, reducing notifications or asking for help.
Understanding media effects on mood	Learner recognises that repeated online content may affect confidence, stress or sense of control.

Balancing online and offline activity	Learner chooses a balanced response when digital engagement becomes excessive or stressful.
Recognising long-term habit effects	Learner identifies repeated habits that may increase stress, confusion or fear.
Recognising emotional manipulation	Learner notices when content uses emotion to push quick reactions.
Applying the routine across platforms	Learner uses the Pause for Digital Well-being Routine in one messaging, social media, news, video or service scenario.
Supporting peers	Learner selects respectful advice for someone overwhelmed by digital content.
Transferring the routine	Learner applies well-being strategies to a new platform or stressful digital situation.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing a suitable self-regulation strategy, identifying emotional pressure or selecting a calmer response.
True/False	Checking basic understanding of digital overload, emotional triggers, pauses, breaks and healthy digital habits.
Gap Fill	Reinforcing key terms such as digital well-being, overload, notification, pause, emotion, stress, self-regulation or support.

Every answer should include feedback. Feedback should reinforce calm, non-shaming action.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the safer answer because it pauses before reacting and gives the learner time to check or take a break.”
Incorrect answer feedback	“This answer reacts under emotional pressure. A calmer step is to pause, notice the feeling and decide whether to check, wait or take a break.”

17.8 Learner routine: Pause for Digital Well-being Routine

At the end of the module, learners should be introduced to a short routine for stressful, confusing or emotionally intense digital situations.

When digital content feels overwhelming, ask:

Step	Question
Pause	Do I need to react immediately, or can I wait?
Feeling	What feeling is this content creating in me?
Pressure	Is it trying to make me afraid, angry, guilty, rushed or helpless?
Usefulness	Is this helping me understand, or is it making me more confused or stressed?
Choice	Should I check, save for later, mute, close, take a break or ask for help?
Balance	What offline action or support could help me feel calmer?

A shorter memory version may be used in learner-facing MOOC materials: **Pause. Notice feeling. Reduce pressure. Choose calmly.**

17.9 Tailored approach to the target group

This module should be presented as part of digital resilience, not as therapy. It should help learners recognise stress, overload and emotional pressure in digital environments, but it should not diagnose mental health conditions or replace professional support.

Examples should be familiar and concrete: too many notifications, family group messages, alarming health posts, scam warnings, dramatic news headlines, angry comment sections, repeated negative videos, confusing public service websites, or pressure to respond immediately.

The tone should be calm and non-patronising. Learners should not be told that they are too emotional or unable to handle digital life. Emotional reactions are normal. The goal is to notice them and avoid making rushed decisions because of them.

The module should balance risk and positive participation. Digital tools can reduce loneliness, support communication, provide useful services and enable learning. Digital well-being does not mean avoiding the internet. It means using digital tools in ways that support autonomy, connection and confidence.

The module should also respect individual differences. Some learners enjoy active online communication; others prefer limited use. Some feel stressed by news; others feel reassured by staying informed. The aim is not to prescribe one correct level of digital use, but to support intentional and manageable habits.

17.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Pause for Digital Well-being Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on emotional reactions, overload, stress, self-regulation and digital well-being.
Recognised emotional pressure	Identification of fear, anger, guilt, urgency, helplessness or confusion in at least one digital example.
Recognised overload	Identification of too many messages, notifications, conflicting claims or stressful digital demands.
Applied the routine	Use of the Pause for Digital Well-being Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal digital habits	Short reflection on one digital habit the learner may want to keep, reduce or change.

17.11 Link to the next module

This module helps learners recognise how digital content affects mood, stress, confidence and sense of control. Module 8 builds on this by focusing on responsible sharing and communication. Learners will move from asking “How does digital life affect me?” to asking “What effect can my own sharing, comments and messages have on others?”

18. Module 8: Responsible sharing and communication

18.1 Module summary

Element	Description
Module title	Responsible Sharing and Communication
Indicative workload	7.5 hours
Main focus	Communicating respectfully, checking before sharing and understanding the consequences of online actions
Main competency achieved in this module	The learner can make responsible decisions before sharing, forwarding, commenting or replying online, with awareness of accuracy, privacy, emotional impact and possible social consequences.
Corresponding learning outcome cluster	Cluster 8: Responsible Sharing and Communication
Main practical routine	Think Before You Share Routine
Main assessment approach	Short quizzes, sharing-decision scenarios, communication-dilemma tasks, respectful-response activities and reflection prompts

18.2 Module context

Digital participation is not only about receiving information. Older adults also send messages, forward posts, comment on content, share photos, react to news, participate in groups and communicate with family, friends, institutions and communities. Every digital action can have consequences. A forwarded message can spread false information. A comment can calm or escalate a discussion. A shared photo can affect someone's privacy. A quick reaction can unintentionally support manipulation.

This module helps learners think carefully before sharing or responding online. It builds on all previous modules. Learners have already practised checking sources, recognising manipulation, understanding AI-generated content, noticing algorithmic exposure, avoiding scams, protecting personal data and managing emotional pressure. Module 8 brings these skills together in responsible digital communication.

The aim is not to discourage learners from participating online. Responsible sharing does not mean silence. It means making more careful choices: checking before forwarding, respecting privacy, avoiding emotional escalation, communicating clearly and understanding that online actions may affect other people.

This module should be practical and non-judgemental. Many people forward messages because they want to help, warn, inform or connect with others. The issue is not intention alone. Even well-intentioned sharing can cause harm if information is inaccurate, private, manipulative or emotionally inflammatory. The module therefore supports a simple habit: stop and think before sharing.

18.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
Should I share this information?	Supports responsible decision-making before forwarding or posting.
Have I checked whether it is accurate?	Connects sharing with source checking and verification.
Could this harm someone if it is false or incomplete?	Builds awareness of social consequences.
Does this message include someone's personal information or photo?	Connects sharing with privacy and consent.
Am I reacting calmly or emotionally?	Connects communication with digital well-being.

Is this comment respectful and necessary?	Supports healthier online communication.
Could my message be misunderstood?	Encourages clearer and more careful expression.
Is this private conversation suitable for wider sharing?	Supports awareness of context and audience.
How can I disagree without insulting or escalating?	Supports respectful participation.
What should I do if I am unsure?	Encourages checking, waiting or asking for help.

18.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Identify when not to share information online.	I can recognise situations where it is safer not to share, forward or repost content.	Learner chooses not to share in examples involving uncertainty, privacy risk, emotional pressure or missing evidence.
2. Recognise social consequences of online sharing.	I can understand that what I share may affect other people, relationships, communities or public discussion.	Learner identifies possible consequences of sharing a misleading post, private photo or inflammatory message.
3. Apply basic decision-making before sharing content.	I can pause, check the source, consider privacy and decide whether sharing is responsible.	Learner applies a short sharing checklist to a realistic example.
4. Explain responsibility linked to digital communication.	I can explain that online communication carries responsibility, even when I only forward something from someone else.	Learner selects or writes a short explanation of responsibility in a forwarding scenario.
5. Evaluate potential impact of shared information.	I can think about who may be affected by the information I share and what could happen next.	Learner identifies possible impact on a person, group, institution or public discussion.
6. Analyse ethical dimensions of online participation.	I can recognise ethical issues such as privacy, consent, accuracy, respect, dignity and possible harm.	Learner identifies ethical concerns in a digital communication scenario.
7. Apply respectful communication strategies in digital spaces.	I can communicate online in a respectful way, including when I disagree.	Learner chooses a respectful reply instead of an insulting, dismissive or escalating response.
8. Evaluate complex communication dilemmas online.	I can make careful choices in situations where there is no simple answer.	Learner chooses a balanced response in a dilemma involving privacy, public interest, family communication or civic discussion.
9. Guide peers in responsible digital interaction.	I can help another person think before sharing or replying, without blaming or humiliating them.	Learner selects or writes respectful advice for a peer who wants to forward questionable content.
10. Adapt communication practices to diverse digital contexts.	I can adjust how I communicate depending on whether I am using private messages, group chats, social media, comments, email or public platforms.	Learner applies the Think Before You Share Routine to different digital contexts.

18.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	Sharing, forwarding and commenting as digital actions	1 hour
Unit 2	When not to share	1.25 hours
Unit 3	Privacy, consent and audience	1.25 hours
Unit 4	Respectful communication and disagreement	1.5 hours
Unit 5	Ethical dilemmas and social consequences	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

18.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: Sharing, forwarding and commenting as digital actions	This unit introduces the idea that digital communication is action. Forwarding a message, sharing a post, commenting, reacting with an emoji, tagging someone or posting a photo may influence what others see, believe or feel. Learners should understand that “I only shared it” can still have consequences. The unit should use everyday examples from messaging apps, social media, email and online groups.	Learners identify different online actions and discuss what each action can do: inform, warn, support, pressure, spread, expose, escalate or connect.
Unit 2: When not to share	This unit helps learners recognise situations where not sharing is the safer choice. Content should not be shared if the source is unclear, the claim is unverified, the message creates strong pressure, the information may be private, the image may be misleading, the content may humiliate someone or the learner is unsure. Not sharing can be an active and responsible decision.	Learners review short examples and decide whether to share, check first, ask for permission, wait or not share at all.
Unit 3: Privacy, consent and audience	This unit connects sharing with privacy. Learners should consider whether a message, photo, screenshot, health detail, family story or group conversation is suitable for wider sharing. A message sent privately is not automatically suitable for a public group. A photo of another person should not be shared without considering consent and dignity. The unit should link back to Module 6 on personal data and privacy.	Learners choose appropriate audiences for different examples: private message, family group, public post, no sharing or ask permission first.
Unit 4: Respectful communication and disagreement	This unit focuses on tone, clarity and disagreement. Online communication can easily become harsher than face-to-face communication. Learners should practise respectful replies, careful wording, asking questions, avoiding insults, avoiding public shaming and choosing not to continue an escalating discussion. Respectful communication does not mean agreeing with everything. It means disagreeing without unnecessary harm.	Learners rewrite an aggressive or unclear reply into a calmer and more respectful message.
Unit 5: Ethical dilemmas and social consequences	This unit introduces more complex cases. Learners may face situations where information is partly true but private, emotionally important but unverified, publicly relevant but harmful, or shared by someone they trust but still questionable. The unit should help learners weigh accuracy, privacy, dignity, public interest, possible harm and responsibility.	Learners analyse a short dilemma and choose the most responsible action, explaining what they considered.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Think Before You Share Routine. Learners apply the routine to one realistic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that responsible sharing protects both the learner and others.	Learners answer: What type of content should I check before sharing? What type of content should I not share at all? How can I respond respectfully when I disagree?

18.7 Assessment

Assessment in this module should check whether learners can make responsible sharing and communication decisions. It should focus on practical judgement, privacy, accuracy, respect and possible consequences.

Assessment should focus on:

Assessment focus	Example evidence
Recognising when not to share	Learner identifies examples where sharing is unsafe, harmful, premature or unnecessary.
Understanding social consequences	Learner recognises how sharing may affect individuals, groups, relationships or public discussion.
Applying a sharing decision routine	Learner checks source, privacy, emotion, audience and possible harm before sharing.
Understanding communication responsibility	Learner explains that forwarding or reposting still carries responsibility.

Evaluating impact	Learner identifies possible consequences of sharing inaccurate, private or inflammatory content.
Recognising ethical issues	Learner notices privacy, consent, dignity, accuracy, respect and possible harm.
Communicating respectfully	Learner chooses or writes a respectful response in an online discussion.
Handling dilemmas	Learner chooses a balanced response when accuracy, privacy, emotion and public interest are in tension.
Supporting peers	Learner selects respectful advice for someone who wants to share questionable content.
Adapting communication to context	Learner chooses different communication approaches for private messages, group chats, public posts, comments or email.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing whether to share, check, ask permission, wait, not share or respond respectfully.
True/False	Checking basic understanding of privacy, responsibility, consent, respectful disagreement and sharing consequences.
Gap Fill	Reinforcing key terms such as sharing, consent, audience, privacy, respect, impact, responsibility or public post.

Every answer should include feedback. Feedback should help learners understand why one action is more responsible than another.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the more responsible answer because it checks the information and respects the privacy of the people involved before sharing.”
Incorrect answer feedback	“This answer shares too quickly. A safer step is to check the source, think about who may be affected and consider whether the content should be shared at all.”

18.8 Learner routine: Think Before You Share Routine

At the end of the module, learners should be introduced to a short routine for sharing, forwarding, replying or commenting.

Before sharing or responding online, ask:

Step	Question
Truth	Have I checked whether this is accurate?
Source	Do I know where it came from?
Privacy	Does it include someone's personal information, image or private situation?
Emotion	Am I sharing because I feel rushed, angry, afraid or pressured?
Audience	Who will see this, and is this the right place to share it?
Impact	Could this harm, confuse, expose or unfairly target someone?
Choice	Should I share, check, ask permission, respond calmly, wait or not share?

A shorter memory version may be used in learner-facing MOOC materials: **Truth. Privacy. Emotion. Audience. Impact. Choice.**

18.9 Tailored approach to the target group

This module should be taught without blaming learners for previous sharing decisions. Many people share content because they want to help others, warn friends, support a cause, express concern or stay connected. The module should respect these intentions while explaining that good intentions do not remove the need for checking and responsibility.

Examples should be familiar: family group messages, local community posts, health warnings, pension-related information, photos from events, political posts, public service rumours, emotional appeals, screenshots, comments under news posts or messages forwarded by trusted people.

The module should avoid presenting responsible communication as censorship. The aim is not to silence learners, but to help them participate more carefully and confidently. Responsible communication protects credibility, relationships, privacy and community trust.

The module should also recognise that older adults may play an important role in families and communities. They often forward information to relatives, friends or local groups. This can be positive when information is useful and checked. The module should therefore strengthen their role as careful communicators, not discourage them from participation.

Respectful disagreement should be practised through simple examples. Learners should see that they can ask a question, request a source, express doubt, correct information or stop participating in a heated discussion without insulting others.

18.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Think Before You Share Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on sharing, forwarding, privacy, consent, respect and consequences.
Recognised when not to share	Identification of at least one example where not sharing is the safer or more responsible choice.
Evaluated communication impact	Recognition of how a post, message, photo or comment could affect another person or group.
Applied the routine	Use of the Think Before You Share Routine in one realistic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal communication habits	Short reflection on one type of content the learner will check more carefully before sharing.

18.11 Link to the next module

This module helps learners understand the responsibility connected with sharing, forwarding, commenting and replying online. Module 9 builds on this by focusing on civic and democratic participation online. Learners will move from asking “What effect can my own sharing and communication have on others?” to asking “How can I participate in digital public life in an informed, responsible and resilient way?”

19. Module 9: Civic and democratic participation online

19.1 Module summary

Element	Description
Module title	Civic and Democratic Participation Online
Indicative workload	7.5 hours
Main focus	Participating in digital public life with awareness of credibility, manipulation, polarisation and responsibility
Main competency achieved in this module	The learner can identify trustworthy civic information, recognise manipulation in public digital communication and participate in online civic spaces in an informed, respectful and responsible way.
Corresponding learning outcome cluster	Cluster 9: Civic and Democratic Participation Online
Main practical routine	Responsible Civic Participation Routine
Main assessment approach	Short quizzes, civic-information checking tasks, campaign-evaluation scenarios, respectful-discussion activities and manipulation-recognition tasks

19.2 Module context

Digital media are increasingly important for public and community life. Older adults may use digital tools to read public information, follow local news, access public services, participate in community groups, sign petitions, follow civic campaigns, contact institutions, take part in consultations or discuss public issues with others.

This can strengthen participation. Digital spaces can help older adults stay informed, express opinions, access services and remain connected to their communities. However, civic information online can also be confusing, emotional, polarising or manipulative. Public issues may be presented through misleading headlines, selective information, fake campaigns, hostile comments, artificial amplification, false urgency or content designed to create anger and division.

This module helps learners participate in digital public life with greater confidence and care. The aim is not to tell learners what political opinions to hold. The aim is to help them check civic information, recognise manipulation, protect privacy, communicate respectfully and make informed choices before reacting or sharing.

Module 9 builds on all previous modules. Learners have already practised credibility checking, manipulation awareness, AI-content checking, algorithmic awareness, scam prevention, privacy protection, digital well-being and responsible sharing. This module brings these competences together in civic and democratic contexts.

The module should treat older adults as citizens with experience, memory, local knowledge and civic judgement. Many older learners have long experience of community life, public institutions, elections, media narratives and political communication. The module should help them transfer that experience into digital public spaces, where information can move faster, emotional pressure can be stronger and sources can be harder to verify.

19.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
Is this civic information from a trustworthy source?	Supports reliable public information checking.
Is this post informing me or trying to provoke me?	Helps identify emotional and polarising content.
Who is behind this campaign, petition or public message?	Builds awareness of organisers, motives and transparency.
Is important context missing?	Supports careful interpretation of public claims.
Could this content divide, blame or manipulate people?	Helps recognise polarisation, scapegoating and civic manipulation.
How can I participate respectfully online?	Supports responsible public communication.
What personal data should I avoid sharing in civic spaces?	Connects civic participation with privacy protection.
How can digital media influence public opinion and democratic processes?	Builds awareness of digital influence without requiring technical expertise.
What should I do before signing, sharing, commenting or reacting?	Supports safer civic decision-making.
How can I support others in checking civic information?	Encourages peer support and community resilience.

19.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Recognise opportunities for civic participation online.	I can recognise ways to take part in public or community life online, such as public services, consultations, petitions, local groups or civic campaigns.	Learner identifies examples of online civic participation.
2. Identify trustworthy civic information sources.	I can look for official, transparent or reliable sources when checking public information.	Learner selects suitable sources for checking a civic claim.
3. Engage responsibly in online discussions.	I can participate in online discussions without insults, pressure or careless sharing.	Learner selects or writes a respectful discussion response.
4. Explain how digital media influences democratic processes.	I can understand that online information, platforms, campaigns, comments and sharing can influence public opinion and participation.	Learner explains one way digital media can affect civic decisions or public debate.
5. Evaluate credibility of civic campaigns online.	I can check who is behind a campaign, what it asks for and whether it provides reliable information.	Learner applies a checking routine to a campaign, petition or public-message example.
6. Analyse risks of manipulation in civic discourse.	I can recognise fear, anger, blame, polarisation, missing context or false authority in public digital messages.	Learner identifies manipulation signs in a civic post or campaign message.
7. Apply informed judgement in online civic engagement.	I can decide whether to share, sign, comment, wait, check more or ask for help before taking civic action online.	Learner chooses a safer and more informed response in a civic scenario.
8. Evaluate ethical responsibilities of digital citizenship.	I can understand that civic participation online includes responsibility for accuracy, respect, privacy and possible harm.	Learner identifies ethical responsibilities in a public discussion or campaign example.
9. Support peers in informed civic participation.	I can help another person check civic information or participate responsibly without blaming or humiliating them.	Learner selects or writes respectful advice for a peer.
10. Adapt civic engagement strategies to evolving digital contexts.	I can use responsible civic participation routines when new platforms, campaign formats or public communication tools appear.	Learner applies the Responsible Civic Participation Routine to a new or unfamiliar civic digital situation.

19.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	Digital public life and civic participation	1 hour
Unit 2	Trustworthy civic information and official sources	1.25 hours
Unit 3	Campaigns, petitions and public messages	1.25 hours
Unit 4	Polarisation, manipulation and public discourse	1.5 hours
Unit 5	Respectful discussion and ethical digital citizenship	1.5 hours
Unit 6	Module reflection, routine and assessment	1 hour
Total		7.5 hours

19.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: Digital public life and civic participation	This unit introduces digital civic participation in everyday terms. Civic participation may include reading public information, following local community updates, using public service portals, joining local groups, signing petitions, taking part in consultations, contacting institutions, following civic campaigns or discussing public issues. The unit emphasises that online participation can be useful and meaningful, but it requires careful judgement.	Learners identify examples of civic participation and distinguish them from entertainment, private communication or commercial activity.
Unit 2: Trustworthy civic information and official sources	This unit focuses on checking public information. Learners should understand the value of official websites, transparent institutions, reliable media, named organisations, clear contact information, publication dates, evidence and cross-checking. They should also understand that a social media post about a public issue is not automatically a reliable civic source.	Learners choose the best source for checking a public claim, such as a local service change, health measure, election information, pension-related information or community announcement.
Unit 3: Campaigns, petitions and public messages	This unit helps learners evaluate civic campaigns, petitions, donation appeals and public messages. Learners should ask who organised the campaign, what it asks people to do, what evidence it provides, whether it uses emotional pressure, whether it asks for personal data and whether the goal is clear. The unit should avoid discouraging participation; the aim is informed participation.	Learners review a sample campaign or petition and identify organiser, purpose, evidence, requested action and possible privacy concerns.
Unit 4: Polarisation, manipulation and public discourse	This unit focuses on polarisation and manipulation in civic communication. Public digital messages may use fear, anger, blame, “us versus them” language, simplified enemies, selective evidence, fake authority, manipulated images or missing context. Learners should recognise that polarising content may push people to react before checking. The unit should connect with Modules 2, 3, 4 and 7.	Learners examine a public post and identify signs of emotional pressure, missing context, polarisation or manipulation.
Unit 5: Respectful discussion and ethical digital citizenship	This unit supports responsible civic communication. Learners should practise respectful disagreement, asking for sources, avoiding insults, protecting personal data, avoiding public shaming and choosing not to participate in hostile discussions. Ethical digital citizenship includes accuracy, respect, privacy, dignity and awareness of possible harm.	Learners rewrite an aggressive civic comment into a calmer, more respectful response or choose when not to continue a discussion.
Unit 6: Module reflection, routine and assessment	The final unit consolidates the Responsible Civic Participation Routine. Learners apply the routine to one realistic civic example and complete a short quiz or equivalent assessment activity. The unit should reinforce that democratic participation online requires both confidence and caution.	Learners answer: What should I check before signing, sharing, commenting or reacting to a public issue online?

19.7 Assessment

Assessment in this module should check whether learners can identify trustworthy civic information, recognise manipulation in public communication and choose responsible forms of participation. It should not assess political opinions.

Assessment should focus on:

Assessment focus	Example evidence
Recognising civic participation opportunities	Learner identifies examples such as public services, consultations, local groups, petitions or community campaigns.
Identifying trustworthy civic sources	Learner selects official, transparent or reliable sources for checking public information.
Responsible discussion	Learner chooses a respectful response in an online public discussion.
Understanding digital influence on democratic processes	Learner recognises that online information, platforms, campaigns and comments can influence public opinion or participation.
Evaluating civic campaigns	Learner checks organiser, purpose, evidence, requested action and transparency.
Recognising civic manipulation	Learner identifies fear, anger, blame, polarisation, false authority or missing context.
Applying informed judgement	Learner chooses whether to sign, share, comment, check further, wait or ask for help.
Ethical digital citizenship	Learner recognises responsibilities related to accuracy, respect, privacy, dignity and possible harm.
Supporting peers	Learner selects respectful advice for someone unsure about a civic message or campaign.
Transferring the routine	Learner applies the Responsible Civic Participation Routine to a new civic platform, public message or campaign format.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing a trustworthy source, selecting the safest civic action, identifying manipulation signs or choosing a respectful reply.
True/False	Checking basic understanding of civic participation, public sources, campaigns, polarisation and responsible discussion.
Gap Fill	Reinforcing key terms such as civic participation, public information, campaign, petition, source, polarisation, responsibility or digital citizenship.

Every answer should include feedback. Feedback should avoid political judgement and focus on process: checking sources, identifying manipulation, respecting privacy and communicating responsibly.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is the more responsible answer because it checks the source and organiser before taking civic action online.”
Incorrect answer feedback	“This answer reacts too quickly. In civic topics, it is safer to check who is behind the message, what evidence is provided and whether the content uses emotional pressure.”

19.8 Learner routine: Responsible Civic Participation Routine

At the end of the module, learners should be introduced to a short routine for public information, civic campaigns, petitions, public discussions and community issues.

Before signing, sharing, commenting or reacting to civic content, ask:

Step	Question
Source	Who published this public information or campaign?
Purpose	What does it want me to think, feel or do?
Evidence	What facts, sources or links support the claim?
Transparency	Is the organiser, institution or group clearly identified?
Emotion	Is it using fear, anger, blame or urgency to push action?

Privacy	Does it ask me to share personal data or expose someone else?
Action	Should I sign, share, comment, check more, wait, ask for help or not engage?

A shorter memory version may be used in learner-facing MOOC materials: **Source. Purpose. Evidence. Emotion. Privacy. Act responsibly.**

19.9 Tailored approach to the target group

This module avoids telling learners what to think politically. It should focus on how to check civic information and how to participate responsibly. The curriculum should support democratic autonomy, not political instruction.

Examples should be familiar and locally adaptable: local public service announcements, public health information, pension-related information, municipality notices, election information, community Facebook groups, petitions, donation appeals, environmental campaigns, neighbourhood issues, civic consultations or messages about public safety.

Sensitive political examples are selected carefully. In national adaptations, examples must not unnecessarily polarise learners or make the learning environment feel unsafe. When politically sensitive examples are used, the focus remains on source, evidence, transparency, manipulation and responsible communication.

The module values older learners' civic experience. Many learners may have long histories of voting, community involvement, public service use, trade union participation, volunteering, neighbourhood life or institutional contact. This experience can support critical judgement. The module helps transfer that judgement into digital civic spaces.

The module also recognises that some older learners may avoid online public discussion because it feels hostile or confusing. Learners understand that civic participation does not always mean commenting publicly. It may also mean checking public information, using official services, reading reliable sources, contacting an institution, participating in a consultation, signing a verified petition or discussing issues respectfully in a trusted group.

19.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and demonstrated the ability to apply the Responsible Civic Participation Routine to at least one realistic example. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Engaged with key concepts	Short quiz, activity or reflection on civic participation, public information, campaigns, polarisation, responsible discussion and digital citizenship.
Identified trustworthy civic sources	Selection of suitable sources for checking a public claim or civic message.
Recognised civic manipulation	Identification of emotional pressure, blame, polarisation, missing context or false authority in a civic example.
Evaluated civic action	Decision about whether to sign, share, comment, check further, wait or ask for help.
Applied the routine	Use of the Responsible Civic Participation Routine in one realistic civic example.
Completed assessment	Successful completion of module quiz or equivalent task.
Reflected on personal civic participation	Short reflection on one way the learner can participate in digital public life more carefully and confidently.

19.11 Link to the next module

This module helps learners participate in digital public life with awareness of credibility, manipulation, polarisation and responsibility. Module 10 completes the curriculum by focusing on reflective digital autonomy and transfer. Learners will move from asking “How can I participate responsibly in digital public life?” to asking “How can I continue applying these routines independently in new digital situations?”

20. Module 10: Reflective digital autonomy and transfer

20.1 Module summary

Element	Description
Module title	Reflective Digital Autonomy and Transfer
Indicative workload	7.5 hours
Main focus	Applying learned strategies to new digital situations and building personal routines for safer digital participation
Main competency achieved in this module	The learner can reflect on personal digital learning, select appropriate judgement routines and transfer them to unfamiliar or changing digital situations with confidence and appropriate support.
Corresponding learning outcome cluster	Cluster 10: Reflective Digital Autonomy and Transfer
Main practical routine	Personal Digital Autonomy Plan
Main assessment approach	Short quizzes, reflection prompts, transfer scenarios, routine-selection tasks and personal planning activities

20.2 Module context

Digital life will continue to change. New platforms, scams, AI tools, privacy settings, public services, media formats and communication habits will appear. For this reason, the SMART AGE curriculum cannot prepare learners only for the exact examples used during the course. It helps them build judgement routines that can be reused in new situations.

This final module helps learners look back at the whole learning pathway. They identify what they have learned, which routines are most useful for them, where they feel more confident and where they may still need support. The module also helps them practise applying these routines to unfamiliar digital examples.

Digital autonomy does not mean solving every digital problem alone. It means being able to pause, check, compare, verify, protect personal data, communicate responsibly and ask for help when needed. It also means recognising one's own progress and knowing how to continue learning after the course.

Module 10 brings together the competences developed in Modules 1–9: credibility checking, manipulation awareness, AI-content checking, algorithmic awareness, scam prevention, privacy protection, digital well-being, responsible sharing and civic participation. Its purpose is to help learners move from course participation to everyday digital autonomy.

The module does not feel like a final exam. It functions as consolidation, reflection and preparation for continued use. Learners finish the pathway with a practical personal plan: which routines they will remember, when they will use them, what situations require extra caution and who they can ask for support.

20.3 Key learner questions

This module helps learners answer the following questions:

Learner question	Purpose
What have I learned about my own digital habits?	Supports reflection on progress.
Where do I feel more confident now?	Helps learners recognise growth.
Which checking routines are most useful for me?	Helps learners consolidate practical strategies.
What can I do when I meet a new or unfamiliar digital situation?	Supports transfer of learning.
When do I need to stop, check, compare, verify or ask for help?	Reinforces safer problem-solving.
How can I protect my confidence when digital life changes?	Supports long-term autonomy.

Which digital situations still require support?	Normalises autonomy with help.
How can I explain a safer routine to someone else?	Encourages peer support.
How can I keep learning after the course?	Supports sustainability.
What will my personal digital autonomy plan include?	Connects reflection with practical action.

20.4 Learning outcomes and evidence of learning

By the end of this module, learners should be able to:

Learning outcome	Learner-friendly wording	Possible evidence of learning
1. Reflect on personal digital learning experiences.	I can think about what I have learned during the course and how it connects to my everyday digital life.	Learner completes a short reflection on learning progress.
2. Recognise growth in digital judgement over time.	I can notice where I feel more careful, confident or independent than before.	Learner identifies at least one area of increased confidence or improved judgement.
3. Apply learned strategies to new digital situations.	I can use course routines when I meet a new message, platform, service, scam, post or digital problem.	Learner applies an appropriate routine to an unfamiliar scenario.
4. Explain personal criteria for trustworthy media engagement.	I can explain what makes me more likely to trust, check, wait or reject digital content.	Learner identifies personal trust criteria such as source, evidence, context, privacy, emotion and comparison.
5. Transfer critical skills across platforms and topics.	I can use similar checking questions in different places: social media, messages, websites, public services, video platforms or apps.	Learner matches routines with different platforms and topics.
6. Analyse own decision-making patterns online.	I can notice how I usually react online and where I may need to slow down or check more.	Learner reflects on one personal reaction pattern, such as quick sharing, trusting familiar senders or avoiding difficult tasks.
7. Adapt strategies when encountering unfamiliar technologies.	I can use familiar routines even when a new technology looks different.	Learner chooses a suitable strategy for an unfamiliar tool, platform or AI-related situation.
8. Integrate experience-based judgement into daily digital life.	I can combine my life experience with digital checking routines in everyday decisions.	Learner explains how personal experience and course routines can work together.
9. Guide peers in developing digital autonomy.	I can support another person by asking good questions and suggesting routines, without taking over their decisions.	Learner selects or writes respectful peer-support advice.
10. Design context-specific solutions for emerging digital challenges.	I can create a practical response for a new digital challenge by adapting what I already know.	Learner designs a simple action plan for a new or emerging digital situation.

20.5 Suggested unit structure and workload

Unit	Suggested focus	Indicative workload
Unit 1	Looking back: what changed in my digital judgement?	1 hour
Unit 2	Choosing the right routine for the right situation	1.5 hours
Unit 3	Transfer to unfamiliar platforms, messages and technologies	1.5 hours
Unit 4	Personal decision patterns and confidence	1.25 hours
Unit 5	Peer support and autonomy with help	1.25 hours
Unit 6	Personal Digital Autonomy Plan and assessment	1 hour
Total		7.5 hours

20.6 Unit guidance

Unit	Guidance	Suggested learner activity
Unit 1: Looking back: what changed in my digital judgement?	This unit invites learners to reflect on their progress across the course. They should revisit key areas: checking information, recognising manipulation, understanding AI-generated content, noticing algorithmic exposure, avoiding scams, protecting privacy, managing stress, sharing responsibly and participating in civic spaces. The focus should be on recognising growth, not on listing mistakes.	Learners complete a short self-reflection: “Before this course I usually..., now I am more likely to...”
Unit 2: Choosing the right routine for the right situation	This unit helps learners connect situations with routines. A suspicious message may require Stop–Check–Verify–Ask. A dramatic post may require Pause–Check–Compare. A privacy decision may require Personal Data Protection. A civic campaign may require Responsible Civic Participation. Learners should understand that routines are tools, and different situations may require different tools.	Learners match several scenarios with the most appropriate routine and explain why.
Unit 3: Transfer to unfamiliar platforms, messages and technologies	This unit supports transfer. Learners practise applying familiar questions to unfamiliar examples: a new app, a new AI tool, a new scam format, a new public service portal, a new social media feature or a new type of recommendation. The unit should reinforce that interfaces may change, but judgement questions remain useful.	Learners apply one routine to an unfamiliar scenario and decide what they would check first.
Unit 4: Personal decision patterns and confidence	This unit helps learners notice their own habits. Some learners may share too quickly when content comes from a trusted person. Others may avoid useful services because they fear mistakes. Some may react strongly to alarming news. Others may find privacy settings confusing. The aim is not self-criticism, but self-awareness.	Learners choose one personal digital habit they want to keep, one they want to improve and one situation where they will ask for support.
Unit 5: Peer support and autonomy with help	This unit focuses on supporting others respectfully. Older learners may support friends, partners, relatives or peers. Good support does not mean taking over the other person’s device or decision. It means asking good questions, showing a routine, checking together and respecting the person’s autonomy. The unit should connect peer support with dignity and confidence.	Learners choose or write a supportive response to someone who asks whether a message, link, image or civic post can be trusted.
Unit 6: Personal Digital Autonomy Plan and assessment	The final unit brings the module and curriculum together. Learners prepare a short Personal Digital Autonomy Plan and complete the module assessment. The plan should be simple and practical, not bureaucratic. It should identify useful routines, high-risk situations, trusted support sources and one or two habits the learner wants to continue.	Learners complete a Personal Digital Autonomy Plan with selected routines, warning signs, support contacts and personal next steps.

20.7 Assessment

Assessment in this module should check whether learners can reflect on learning, select appropriate routines and transfer strategies to new situations. It should not function as a high-pressure final examination. It should support consolidation and confidence.

Assessment should focus on:

Assessment focus	Example evidence
Reflection on learning	Learner identifies what they have learned and where they feel more confident.
Recognition of progress	Learner recognises improvement in digital judgement, caution or confidence.
Applying strategies to new situations	Learner chooses and applies a suitable routine to an unfamiliar scenario.
Explaining trust criteria	Learner identifies source, evidence, context, comparison, privacy and emotional pressure as criteria for judgement.
Transferring across platforms	Learner applies similar questions across messages, websites, platforms, apps or public services.
Recognising personal patterns	Learner identifies a personal habit that supports or weakens safer digital participation.
Adapting to unfamiliar technologies	Learner chooses careful first steps when meeting a new tool or platform.

Integrating experience and routines	Learner explains how personal experience and course routines can support each other.
Supporting peers	Learner selects respectful advice that supports autonomy rather than taking over.
Designing a response to new challenges	Learner creates a simple action plan for a new digital risk or unfamiliar situation.

Recommended question types for the MOOC:

Question type	Use in this module
Multiple Choice	Choosing the most suitable routine, selecting safer transfer strategies, identifying support options or choosing a response to unfamiliar situations.
True/False	Checking basic understanding of autonomy, transfer, support, confidence and continued learning.
Gap Fill	Reinforcing key terms such as autonomy, transfer, routine, judgement, support, confidence, reflection or adaptation.

Every answer should include feedback. Feedback should reinforce confidence and transfer.

Example feedback pattern:

Answer type	Example feedback
Correct answer feedback	“This is a good transfer choice because it uses a familiar checking routine in a new digital situation.”
Incorrect answer feedback	“This answer reacts before checking. A safer approach is to choose a routine, check the source or risk, and ask for help if the situation is important or unclear.”

20.8 Learner routine: Personal Digital Autonomy Plan

At the end of the module, learners should create a short Personal Digital Autonomy Plan. The plan can be presented as a simple downloadable or printable template in the MOOC.

The plan should include:

Plan element	Guiding question
My useful routines	Which routines from the course will I use most often?
My warning signs	What signs tell me to stop and check?
My high-risk situations	When should I be especially careful?
My trusted sources	Where can I check reliable information?
My support circle	Who can I ask for help when needed?
My privacy choices	What information do I want to protect more carefully?
My well-being habit	What digital habit will help me feel calmer and more in control?
My participation habit	How can I participate online responsibly and confidently?
My next learning step	What do I want to learn or practise next?

A shorter memory version is used in learner-facing MOOC materials where appropriate: **My routines. My warning signs. My trusted sources. My support. My next step.**

20.9 Tailored approach to the target group

This module is affirming without becoming sentimental. Learners finish the pathway recognising that they have developed practical judgement, not that they have mastered every digital tool. Digital life changes too quickly for any course to provide final answers for every situation.

The module emphasises that uncertainty is normal. Digital autonomy does not mean always knowing the correct answer immediately. It means knowing how to pause, choose a routine, check a source, compare information, protect personal data, communicate responsibly and ask for help when needed.

The Personal Digital Autonomy Plan is short and useful. It does not feel like paperwork. It functions as a practical reminder that learners can keep near their device, save as a file or print if they prefer.

Examples draw from all previous modules: suspicious messages, misleading headlines, AI-generated images, repeated recommendations, privacy settings, scam requests, stressful content, sharing dilemmas and civic campaigns. This helps learners see the curriculum as one connected pathway.

Peer support is framed carefully. Learners may support others, but they are not expected to become unpaid technical experts for everyone around them. The focus is on respectful support: asking questions, checking together, suggesting a routine and encouraging others to make informed decisions.

The module also respects different levels of confidence. Some learners may finish the course ready to explore new services. Others may simply feel more prepared to stop, check and ask before acting. Both outcomes are valuable.

20.10 Completion criteria

This module is successfully completed when the learner has worked through all required module units, completed the required knowledge checks or quiz activities, and prepared a Personal Digital Autonomy Plan or equivalent reflection task. In the official SMART AGE MOOC, successful completion requires completion of all mandatory module activities and achievement of the required pass threshold for the module assessment, with multiple attempts allowed.

Completion of this module shows that the learner has:

Completion element	Evidence
Completed the module units	Progress through all module units or equivalent learning activities.
Reflected on learning progress	Short reflection on what has changed in the learner's digital judgement, confidence or habits.
Selected useful routines	Identification of the routines the learner expects to use most often.
Applied transfer	Use of a course routine in one new or unfamiliar digital situation.
Recognised support needs	Identification of at least one situation where the learner needs to ask for help.
Created a Personal Digital Autonomy Plan	Completed plan, checklist or equivalent reflection task.
Completed assessment	Successful completion of module quiz or equivalent task.
Identified next steps	Short reflection on one habit, skill or topic the learner wants to continue developing.

20.11 Link to completion of the learning pathway

This module completes the ten-module SMART AGE curriculum. It helps learners connect the full learning pathway with everyday digital autonomy. After completing this module, learners will move to the final closing section of the MOOC, where they will review completion requirements, receive or prepare for recognition, and be encouraged to continue applying SMART AGE routines in daily digital life.

21. Completion of the micro-credential learning pathway

21.1 Purpose of the closing section

The final closing section completes the SMART AGE Micro-Credential Curriculum. It follows the ten assessed modules and helps learners bring the full learning pathway together.

The purpose of this section is not to introduce a new competence area. Its purpose is to support final reflection, confirm completion requirements, make learning visible and guide learners toward continued digital participation after the course.

The closing section is short, clear and supportive. It helps learners recognise what they have achieved and how they can continue using the learned routines in everyday digital life.

The closing section is also important for the micro-credential logic of the curriculum. It helps connect the learner's completed modules, assessments, routines and reflection with transparent recognition of completion.

21.2 Position in the learning pathway

The SMART AGE learning pathway consists of three parts: an introductory section, ten assessed modules and a final closing section.

Curriculum element	Function
Introductory section	Orientation, technical preparation, motivation and explanation of the learning pathway.
Ten modules	Main learning content, learner activities, assessment and evidence of learning.
Final closing section	Reflection, completion confirmation, recognition and guidance for continued learning.

The ten modules provide the main evidence of learning. They represent the 75-hour micro-credential learning pathway. The introductory and final closing sections support participation and consolidation, but they are not counted as additional curriculum modules.

The introductory section will be especially important in the MOOC implementation. It will help all learners begin from the same basic technical position. This includes explaining how to navigate the course, how to move from one unit to the next, how quizzes work, how automatic feedback is shown, how progress is tracked, where downloadable materials can be found, and what is required for completion.

The final closing section does not function as an additional full module or final high-stakes examination. It helps learners confirm completion, review what they have learned and prepare to continue applying the SMART AGE routines after the course.

21.3 Suggested closing-section activities

The closing section includes the following learner-facing activities:

Activity	Purpose
Review completed modules	Helps learners see the full pathway they have completed.
Revisit key routines	Reinforces practical tools for everyday digital judgement.
Reflect on personal progress	Supports confidence and awareness of learning.
Confirm completion requirements	Makes recognition transparent.
Identify future support sources	Encourages continued autonomy with support.
Save or print key takeaways	Supports transfer into everyday life.

These activities remain simple and manageable. The closing section does not create examination pressure.

In the SMART AGE MOOC, these activities will be implemented through short pages, checklists, downloadable summaries, simple reflection prompts, automatically checked questions, progress-confirmation screens or equivalent accessible elements.

21.4 Review of key learner routines

The closing section reminds learners of the main practical routines developed across the curriculum.

Module	Learner routine
Module 1: Information and Media Literacy	Personal Credibility Routine
Module 2: Disinformation and Manipulation Awareness	Pause–Check–Compare Routine
Module 3: AI-Generated Content Awareness	Check AI Content Carefully Routine
Module 4: Algorithmic Awareness and Information Exposure	Information Diversity Routine
Module 5: Digital Safety and Scam Awareness	Stop–Check–Verify–Ask Routine
Module 6: Privacy and Data Protection	Personal Data Protection Routine
Module 7: Digital Well-being and Emotional Resilience	Pause for Digital Well-being Routine
Module 8: Responsible Sharing and Communication	Think Before You Share Routine
Module 9: Civic and Democratic Participation Online	Responsible Civic Participation Routine
Module 10: Reflective Digital Autonomy and Transfer	Personal Digital Autonomy Plan

These routines are the main transferable tools of the curriculum. They help learners continue using the course content after completion.

The closing section does not simply list the routines. It helps learners recognise when each routine is useful. For example, a suspicious message may require the Stop–Check–Verify–Ask Routine; a dramatic headline may require the Pause–Check–Compare Routine; a public campaign may require the Responsible Civic Participation Routine; and a new digital situation may require the Personal Digital Autonomy Plan.

21.5 Final reflection

Final reflection helps learners recognise their own progress. It does not require long written answers. Learners may answer short prompts, select statements, complete a simple form or discuss their progress in a facilitated setting if the curriculum is adapted outside the MOOC.

Suggested reflection prompts:

Reflection prompt	Purpose
What do I now check more carefully than before?	Recognises progress in digital judgement.
Which routine is most useful for me?	Supports transfer into everyday life.
Which digital situation still feels difficult?	Identifies need for continued support.
When should I ask for help?	Reinforces autonomy with support.
What is one digital habit I want to continue?	Encourages sustainable learning.

In the asynchronous MOOC, final reflection must be implemented in a way that does not require individual human review. For example, learners may select statements, complete a short self-assessment, choose a routine they expect to use, or respond to a scenario by selecting the most appropriate action. The purpose is to support consolidation and self-awareness, not to create a written assignment that must be manually evaluated.

The reflection is supportive and confidence-building. It helps learners see that even small changes in behaviour can be meaningful. The final reflection is a mandatory completion activity but is not graded as a high-stakes written assignment.

21.6 Completion requirements

Completion of the full SMART AGE micro-credential learning pathway is based on transparent and predefined requirements. Learners know from the beginning what they need to complete and how their progress will be recognised.

In the SMART AGE MOOC implementation, successful completion will require completion of the introductory section, all ten curriculum modules, all module quizzes or equivalent assessment tasks, the final reflection activity, and achievement of the required assessment threshold.

The recommended minimum threshold is 60% in each module assessment. Learners are allowed multiple attempts, with clear feedback provided after each attempt. The purpose of this threshold is to confirm engagement with the learning outcomes, not to create high-stakes examination pressure. The learner must achieve the threshold in each of the ten module assessments; an overall average cannot compensate for a non-completed module.

In general, completion shows that the learner has:

Completion requirement	Evidence
Completed the introductory section	Orientation completed or equivalent participation recorded.
Completed all ten modules	Module progress completed in the MOOC or equivalent delivery format.
Completed module assessments	Quizzes or equivalent assessment tasks completed for all assessed modules.
Engaged with learner routines	Routines applied through automatically supported module activities, scenario choices, checklist tasks or reflection prompts.
Completed final reflection	Short closing reflection, self-assessment or Personal Digital Autonomy Plan completed.
Met the defined completion threshold	Completion requirement achieved according to the official implementation rules.

In an asynchronous MOOC, engagement with learner routines does not need to be proven through manually reviewed written assignments. It can be shown through practical and automatically supported activities. For example, learners may be asked to choose which routine fits a given situation, select the safest next step in a scenario, complete a checklist, or identify the recommended action in a realistic example. This makes the requirement feasible without expecting an instructor to read and evaluate every reflection.

If the curriculum is implemented in a blended, face-to-face or facilitated local format, equivalent evidence may include guided discussion, short worksheets, oral reflection, group activities or facilitator-confirmed participation. In all formats, evidence remains proportionate to the learner group and the purpose of the curriculum.

The completion requirements must be communicated in clear learner-facing language. Learners can understand what they have completed, what still remains and what is required for recognition.

21.7 Recognition of completion

Learners who complete the full SMART AGE learning pathway receive recognition of completion according to the rules of the official implementation.

Recognition must be transparent. It states what the learner completed, who issued the recognition, what workload was involved, what learning outcomes or competences were addressed, and how learning was assessed.

A digital certificate or equivalent recognition record includes the following elements:

Recognition element	Required information for SMART AGE
Identification of the learner	Name or other agreed learner identifier, depending on the platform and data-protection rules.
Title of the micro-credential	Official title of the SMART AGE MOOC or SMART AGE micro-credential learning pathway.
Country or region of the issuer	Country or region in which the issuing organisation is based.
Awarding body	Organisation responsible for issuing the recognition.
Date of issuing	Date when recognition was issued or when the learner completed the pathway.
Learning outcomes or competences	Reference to the ten module competences and the detailed module learning outcomes.
Notional workload	75 hours, approximately 3 ECTS where applicable, without implying formal ECTS credit unless issued by an authorised provider.
Level of the learning experience, if applicable	EQF, QF-EHEA or national qualification framework level only if formally assigned by an authorised provider. If not formally assigned, this should be stated transparently.
Type of assessment	Completion of ten assessed modules, quizzes or equivalent tasks, scenario-based activities, routine application and final reflection.
Form of participation	Online asynchronous MOOC, or another clearly stated delivery format if adapted.
Type of quality assurance	Alignment with DigComp 3.0 and media/information literacy principles, external review, partner review, piloting with older learners and revision based on feedback.
Issuing organisation contact or reference	Website, platform, institutional reference or other means of verification, where applicable.
Relation to SMART AGE	Clear indication whether this is the official SMART AGE implementation or an adapted use of the curriculum by another organisation.

Recognition does not overstate the result. Completion shows that the learner has completed a structured learning pathway in media literacy, digital resilience and reflective digital autonomy. It does not certify professional expertise in cybersecurity, AI, journalism, fact-checking, digital law or data protection.

If the full pathway is adapted by another organisation, that organisation may issue its own certificate, badge or confirmation. Such recognition must clearly state the issuer, scope, workload, learning outcomes, assessment basis and relation to SMART AGE. It must not present the activity as the official SMART AGE micro-credential unless the official completion requirements and authorisation conditions are met.

21.8 Module progress without partial micro-credential recognition

The SMART AGE micro-credential is awarded only after successful completion of the full ten-module MOOC and all defined completion requirements. Individual modules are important parts of the learning pathway, but they do not constitute separate micro-credentials.

The MOOC platform may show module progress to support learner orientation and motivation. For example, learners may see which modules they have opened, completed or still need to finish. This progress tracking is useful for navigation, especially in an asynchronous course, but it is not presented as formal recognition.

Platform element	Meaning
Module badge	Shows that the learner has completed a module within the MOOC.
Quiz result	Shows learner performance in a specific module assessment.
Completion checklist	Helps the learner see what still needs to be completed.
Full completion certificate or equivalent recognition	Issued only after all ten modules and all required assessments have been completed.

Partial completion may be pedagogically useful, but it does not lead to a SMART AGE micro-credential. A learner who completes only one module, several selected modules or only part of the MOOC has

participated in learning activities, but has not completed the full SMART AGE micro-credential pathway.

This distinction must be communicated clearly in the MOOC. Learners must understand that each module contributes to the final learning profile, but recognition is connected only to the complete pathway. This protects the credibility, transparency and consistency of the SMART AGE micro-credential.

If another organisation uses one module, several modules or a shortened adaptation of the curriculum, it may describe that activity as a workshop, learning activity, training session or adapted course based on SMART AGE materials. However, it must not describe such partial use as completion of the SMART AGE micro-credential.

21.9 Continued learning and support

The closing section encourages learners to continue using the routines after the course. Digital life will continue to change, and learners will meet new tools, risks, platforms, services and forms of media. The goal is therefore not to remember every example, but to continue using careful judgement.

Learners are encouraged to:

Continued practice	Purpose
Keep using the checking routines	Supports transfer of learning.
Save or print key checklists	Makes routines available outside the MOOC.
Use reliable local information sources	Supports safer civic and public service engagement.
Ask for help in high-risk situations	Reinforces autonomy with support.
Share learning carefully with peers	Supports community-level resilience.
Continue learning through trusted organisations	Supports long-term digital inclusion.

Local versions of the curriculum may include relevant support links, such as public service portals, libraries, adult education centres, consumer protection bodies, cybercrime reporting services, older adult associations, local media literacy initiatives or community organisations.

Continued learning should not be presented as a failure to master the course. It should be presented as a normal part of digital life. Technologies, scams, platforms and public communication practices change, so digital resilience depends on continued judgement, adaptation and support.

21.10 Final learner message

The final learner-facing message should be positive and practical. It should avoid exaggerated claims and should not suggest that learners are now protected from all digital risks.

A suitable closing message may be:

You have completed the SMART AGE learning pathway. You have practised how to check information, recognise manipulation, understand AI-generated content, notice repeated exposure, respond safely to scams, protect personal data, manage digital pressure, share responsibly, participate in civic life and apply these routines to new situations.

Digital life will continue to change. You do not need to know everything. You can pause, check, compare, verify, protect your data, ask for help and make careful decisions. These habits support safer, more critical and more confident participation in digital life.

Part C – Implementation, Adaptation and MOOC Guidance

22. SMART AGE MOOC implementation

22.1 Purpose of this chapter

This chapter defines the main implementation requirements for the SMART AGE MOOC. The curriculum provides the educational structure of the learning pathway; the MOOC will translate that structure into a learner-facing online course for older adults.

The purpose of this chapter is not to repeat the full curriculum design. It defines the practical conditions that the MOOC must meet: asynchronous access, clear navigation, accessible design, automated feedback, progress tracking, completion logic and learner support.

More detailed guidance on transforming curriculum modules into MOOC units, activities, videos and quizzes is provided in Chapter 23. Localisation is addressed in Chapter 24. Wider reuse by other organisations is addressed in Chapter 25. Quality criteria are summarised in Chapter 26.

22.2 MOOC structure

The SMART AGE MOOC must implement the full learning pathway. It must include:

MOOC element	Function
Introductory section	Explains course purpose, navigation, workload, assessment, completion and recognition.
Ten assessed modules	Provide the main learning content, activities, quizzes, learner routines and evidence of learning.
Final closing section	Supports final reflection, completion confirmation, recognition and continued use of learner routines.

The recognised workload of the SMART AGE micro-credential is 75 hours, equivalent to approximately 3 ECTS where applicable. This workload refers to the ten assessed curriculum modules. The introductory section and final closing section support learner orientation and completion, but they are not counted as additional curriculum modules.

The MOOC will therefore be developed from the curriculum, not separately from it. Each MOOC module will correspond to one curriculum module. Each MOOC unit will support the learning outcomes, learner routines, assessment logic and older-learner-oriented approach defined in Part B.

In this curriculum, the term “unit” refers to a short learner-facing part of a MOOC module. Depending on the technical platform used, units may be implemented as lessons, topics, pages or equivalent LMS elements.

At the same time, the MOOC will simplify the learner experience. Older learners will not be asked to interpret curriculum documentation. They will see clear module introductions, short explanations, examples, activities, quizzes, feedback, progress information and downloadable takeaways.

The external curriculum review provides a practical design brief for MOOC implementation. All SMART AGE project partners will use the review findings collaboratively when mapping the course, producing learner-facing content, implementing the platform, localising national versions and preparing beta testing. The shared design priorities are plain and respectful learner-facing language, visible terminology support where useful, authentic and locally recognisable examples, flexible self-paced

progression, predictable navigation, accessible media and clear help or support routes. Beta testing will be used to verify whether these design choices work for older learners in practice. These implementation refinements do not change the curriculum's ten-module structure, learning outcomes or recognition logic; they determine how the curriculum will be experienced in the online learning environment.

22.3 Asynchronous and self-paced learning model

The MOOC will be designed as an asynchronous and self-paced learning environment. Learners will be able to access the course independently, at a time and pace that suits them.

This model is important for older learners because they may differ in confidence, reading speed, availability, technical support and previous experience with online learning. The MOOC will therefore reduce unnecessary pressure and provide orientation directly inside the course.

The asynchronous model requires:

Requirement	Meaning for MOOC implementation
Clear instructions	Learners always know what to do next.
Short learning steps	Content is divided into manageable units.
Predictable structure	Modules follow a recognisable pattern.
Visible progress	Learners see what they have completed and what remains.
Automatic feedback	Learners receive feedback without waiting for an instructor.
Multiple attempts	Learners are allowed to try again where appropriate.
Downloadable takeaways	Learners are able to save or print key routines and checklists.
Support information	Learners know where to look for help if they feel uncertain.

The MOOC will not depend on continuous instructor presence. Essential explanations, guidance, examples, feedback and completion information will be built into the course.

22.4 Automation and instant feedback

Automation will be a key requirement for the MOOC. It will allow learners to study independently and receive immediate responses to their actions.

The platform must support:

Automated function	Purpose
Progress tracking	Records which lessons, units or modules have been completed.
Quiz checking	Checks answers automatically where possible.
Instant answer feedback	Explains correct and incorrect answers immediately.
Module badge generation	Provides visible confirmation when module requirements have been met.
Certificate or completion record generation	Supports recognition after all requirements are fulfilled.

Automatic feedback does not only state whether an answer is correct or incorrect. It explains the reason in clear and practical language.

Good feedback is:

Feedback feature	Meaning
Immediate	The learner sees feedback as soon as the answer is submitted.
Explanatory	The feedback explains why the answer is appropriate or risky.
Supportive	The wording avoids blame, shame or ridicule.
Practical	The explanation connects the answer with everyday digital behaviour.
Transfer-oriented	The learner understands how to apply the same idea in future situations.

This is especially important because the MOOC will be asynchronous. Learners will not need to wait for an instructor in order to understand why an answer was correct, incomplete or unsafe.

22.5 Older-learner-oriented platform design

The MOOC will be designed for older learners with different levels of digital confidence. It will not assume that all learners are experienced online learners.

The platform and course design must support:

Design requirement	Application
Simple navigation	Avoid unnecessary menus, hidden steps and complex page structures.
Clear visual hierarchy	Make titles, buttons, tasks and progress indicators easy to recognise.
Readable text	Use clear typography, sufficient spacing and suitable font size.
Strong contrast	Ensure that text, buttons and interactive elements are easy to see.
Consistent layout	Use similar structure across modules and units.
Short pages	Avoid long, dense screens with too many elements.
Plain language	Use learner-facing wording and explain technical terms.
Captions and transcripts	Provide captions and transcripts for video and audio content.
Printable resources	Allow learners to download or print routines and checklists.
Accessible interaction	Avoid tasks that require complex dragging, fast reactions or advanced technical skills.

Accessibility must be part of the basic MOOC design, not an optional add-on. Where technically possible, the platform should enable accessibility options such as font-size adjustment, contrast options, readable display modes, keyboard-friendly navigation and other common web accessibility adaptations.

22.6 Minimum MOOC module elements

Each MOOC module must include the following minimum elements:

Module element	Function
Module introduction	Explains the topic and why it matters in everyday digital life.
Learning goals	Presents what the learner will practise or become better able to do.
Short learning units	Breaks the module into manageable steps.
Realistic examples	Connects the topic with familiar digital situations.
Learner activities	Helps learners apply the idea, not only read or watch.
Knowledge checks or quizzes	Provides practice and evidence of learning.
Answer feedback	Explains correct and incorrect answers.
Learner routine	Summarises the practical routine developed in the module.

Downloadable takeaway	Provides a checklist, reminder or short recap for later use.
Module recap	Repeats the main message and prepares the next module.

The detailed design of learning units, activities and feedback is addressed in Chapter 23. Chapter 22 only defines the minimum implementation expectations for the MOOC.

22.7 Role of videos in the MOOC

Videos should support understanding, recognition and confidence, but they should not replace written explanations, interactive activities, examples, quizzes, reflection prompts or assessment tasks. In the SMART AGE MOOC, videos should therefore be used selectively and purposefully.

Videos are especially useful when they make abstract risks visible through simple explanations, learner routines or recognisable everyday situations. They help older learners understand what is happening, why it matters and what they can do next.

A useful minimum video structure for the MOOC is:

Video type	Purpose
Opening module video	Introduces the topic, connects it with everyday digital life and motivates learners to continue.
Key concept video	Explains one important concept in simple language, for example generative AI, algorithmic recommendations, phishing or personal data.
Risk explanation video	Explains a common digital or media risk, for example how scam messages create urgency or how emotional posts encourage quick sharing.
Learner routine video	Demonstrates a practical routine, for example Stop–Check–Verify–Ask, checking the source, comparing information or deciding not to click.
Illustrative real-life example video	Presents a short fictionalised but realistic situation that older adults may recognise, such as receiving a suspicious message, seeing an emotional social media post, encountering AI-generated content or deciding whether to share information.
Closing module video	Summarises the main message, repeats the learner routine and prepares the transition to the next module.

Illustrative real-life example videos are particularly important for the SMART AGE target group. Many older learners understand digital and media risks more easily when they are presented through recognisable situations rather than through abstract explanations only. These videos do not need to reproduce real cases. They may show possible everyday events, short fictionalised situations or typical decision moments that reflect what older adults may encounter online.

The SMART AGE MOOC is planned in four language versions: English, German, Croatian and Slovenian. Across these four language versions, the MOOC will include a minimum of 100 videos in total. The cumulative planned viewing time across all language versions will be approximately 300–500 minutes. This refers to the multilingual MOOC production as a whole, not to 100 separate conceptual videos in each language.

In practice, the pedagogical core may consist of the same or equivalent video types adapted across the four language versions. For example, an opening module video, a closing module video and selected scenario-based or concept videos may be translated, subtitled, re-recorded or locally adapted. This approach supports consistency across the MOOC while allowing examples, names, screenshots, public services, media references or scam scenarios to be adjusted where needed for national and linguistic contexts.

Videos should be short, clear and slow enough for older learners. They should use readable visuals, calm narration and simple examples. They should avoid fast transitions, crowded screens, small text and unnecessary animation. Each video should normally focus on one main idea, one risk, one routine or one realistic situation.

Captions and transcripts must be provided. Video scripts should be prepared before recording because they support quality control, translation, subtitles, accessibility and localisation. Scripts also help ensure that videos use consistent terminology across modules and languages.

Videos should not introduce too many new terms at once. Their main function is to make the learning pathway more concrete, accessible and memorable, especially in modules dealing with scams, manipulation, AI-generated content, algorithms, privacy, emotional reactions, responsible sharing and civic participation.

22.8 Progress tracking and completion logic

The MOOC will make learner progress visible. This is important because learners may study independently and return to the course after breaks.

The platform must show:

Progress information	Purpose
Completed units	Helps learners see their progress inside a module.
Completed modules	Shows progress through the ten-module pathway.
Completed quizzes or required activities	Helps learners understand assessment progress.
Remaining tasks	Reduces confusion and supports self-paced learning.
Final completion status	Shows whether all requirements for recognition have been met.

Progress tracking will support orientation and motivation. It must not be confused with recognition. A learner may complete one module or several modules, but the SMART AGE micro-credential is connected only to completion of the full MOOC and all required assessment activities.

The platform must therefore distinguish between:

Platform status	Meaning
Unit completed	One learning step has been completed.
Module completed	One curriculum module has been completed.
Quiz passed	A required assessment activity has been completed successfully.
Full MOOC completed	All ten modules and required activities have been completed.
Recognition issued	The learner has met the requirements for the SMART AGE micro-credential or completion record.

This distinction helps protect transparency and prevents misunderstanding.

22.9 Recognition transparency in the MOOC

The SMART AGE micro-credential is awarded only after successful completion of the full MOOC, including all ten assessed modules and the required assessment activities.

The recognition record must clearly state:

Recognition element	Required information
Learner identification	Identifies the learner according to platform and data-protection rules.
Title	States the title of the micro-credential or completion record.
Issuing organisation	Identifies the awarding body.
Date of issue	States when the recognition was issued.
Workload	States 75 hours, approximately 3 ECTS where applicable.

Learning outcomes or competences	Refers to the ten programme-level competences and module learning outcomes.
Assessment type	States how learning was checked.
Form of participation	States that the learning was completed online/asynchronously, unless implemented differently.
Quality assurance reference	Indicates the quality basis of the curriculum and MOOC.

The recognition record does not overstate what has been achieved. Completion of the SMART AGE MOOC shows completion of a structured learning pathway in media literacy, digital resilience and reflective digital autonomy. It does not certify professional expertise in journalism, cybersecurity, AI, digital law, data protection or fact-checking.

22.10 Beta testing with older learners

Before final publication, the MOOC will be tested with older learners. Beta testing will examine both technical functionality and learner experience. The beta testing phase will involve at least 20 older learners in total, with a minimum of 5 learners in each active partner country. If the number or composition of active partner countries changes during implementation, the overall minimum of 20 older learners will be preserved, while each active partner country will include at least 5 older learners in the testing process. Beta testing will not be limited to checking whether the platform works technically. It will also examine whether older learners can understand the course, navigate it independently, complete the required learning steps, use feedback meaningfully and understand what is required for recognition.

Beta testing checks:

Testing focus	Guiding question
Navigation	Can learners find what they need and move to the next step?
Instructions	Do learners understand what they are expected to do?
Language	Is the wording clear and understandable?
Workload	Do units feel manageable?
Accessibility	Are text, video, quizzes and downloadable materials usable?
Feedback	Does feedback help learners understand their answers?
Examples	Do learners recognise the situations?
Confidence	Does the course support rather than discourage learners?
Progress tracking	Do learners understand what they have completed and what remains?
Completion logic	Do learners understand what is required for recognition?

Feedback from beta testing will be collected in a structured way and used to revise the MOOC before final release. Revision will focus on usability, clarity, accessibility, pacing, examples, feedback and completion transparency.

Where possible, beta testing will also monitor completion patterns, including whether learners are able to complete the expected course elements and where they tend to stop, slow down or need additional support. This information will be used to improve the final MOOC experience.

Beta testing is not treated only as a technical check. For SMART AGE, usability, confidence, accessibility and completion transparency are core quality requirements.

22.11 Minimum implementation checklist

Before the MOOC is published, the following implementation checklist must be reviewed.

Implementation question	Yes / Needs revision
Does the MOOC include the introductory section, all ten assessed modules and final closing section?	
Is the 75-hour workload clearly communicated?	
Are all ten programme-level competences represented?	
Are all module learning outcomes covered through content, activities or assessment?	
Is the course structure predictable for learners?	
Are units short and manageable?	
Is navigation clear and simple?	
Are quizzes or required activities automatically checked where possible?	
Does each question include useful answer feedback?	
Is progress tracking visible?	
Are completion requirements clear?	
Are captions, transcripts and downloadable takeaways provided where needed?	
Are accessibility options considered?	
Is recognition issued only after full MOOC completion?	
Has the MOOC been tested with older learners?	

This checklist is not a replacement for the broader quality criteria in Chapter 26. It is a minimum implementation check for the MOOC.

22.12 Summary

The SMART AGE MOOC will implement the curriculum as a clear, accessible and asynchronous online learning pathway for older adults. It will preserve the ten-module structure, programme-level competences, learning outcomes, 75-hour workload, assessment logic, learner routines and recognition requirements. The MOOC will not simply reproduce curriculum text. It will provide a usable learning environment with clear navigation, short units, realistic examples, learner activities, quizzes, instant feedback, progress tracking, downloadable takeaways, accessible design and a beta-tested learner experience.

The quality of the MOOC will depend on whether older learners can understand the course, complete it independently, receive useful feedback and apply SMART AGE routines in everyday digital life.

23. Transforming the curriculum into MOOC content

23.1 Purpose of this chapter

The SMART AGE curriculum defines the educational structure of the learning pathway. The MOOC content must transform that structure into clear, accessible and learner-facing online materials.

This chapter provides practical guidance for turning curriculum modules into MOOC modules, units, learner activities, quizzes, videos, feedback and downloadable resources. It does not introduce new learning outcomes or new curriculum content. Its purpose is to help content developers preserve the curriculum logic while making the course understandable and usable for older learners.

The central question for MOOC content development is:

How will an older learner experience this content on the screen, independently, without an instructor beside them?

The curriculum must not be copied into the MOOC as long text pages. Curriculum language is written for partners, educators, developers and adapting organisations. MOOC language must be written directly for learners.

The external curriculum review also informs the production rules used in this chapter. Across all modules, content developers should treat learner-facing language, pacing, terminology support, authentic examples and learner support as cross-cutting design requirements. These requirements are applied collaboratively across the partnership so that the English master content and the localised versions remain educationally coherent while being understandable and recognisable for older learners in Austria, Croatia and Slovenia.

23.2 From curriculum module to MOOC module

Each curriculum module in Part B must become one MOOC module. The title, main competence, learning outcomes, indicative workload, learner routine and assessment focus must remain aligned with the curriculum. However, the MOOC module should be shorter, clearer and more interactive than the curriculum chapter. It should guide learners step by step through the topic.

Curriculum element	MOOC transformation
Module title	MOOC module title.
Module Summary	Short learner-facing introduction to the module.
Module context	Simple explanation of everyday relevance.
Key learner questions	“Questions this module helps you answer.”
Learning outcomes	Learner-friendly learning goals and activities.
Suggested unit structure	Sequence of MOOC lessons or units.
Unit guidance	Learner-facing explanations, examples and tasks.
Assessment focus	Quizzes, scenarios and automatically checked activities.
Learner routine	Downloadable or printable routine card.
Tailored approach to the target group	Older-learner-oriented wording, pacing, examples and support.
Completion criteria	Clear module completion rules inside the platform.

This transformation preserves the educational meaning of the module while simplifying the learner experience.

23.3 Recommended MOOC module structure

Each MOOC module should follow a predictable structure. Predictability reduces confusion and supports learners who may not be experienced with online courses.

A recommended MOOC module structure is:

MOOC component	Function
Module opening	Explains the topic and why it matters in everyday digital life.
Learning goals	States what learners will practise or become better able to do.
Short units	Divide the module into manageable learning steps.
Realistic examples	Connect learning with familiar digital situations.
Videos	Explain selected concepts, scenarios or routines.
Activities	Help learners apply the idea, not only read or watch.
Knowledge checks	Check understanding and provide feedback.
Learner routine	Summarises the practical routine developed in the module.
Downloadable takeaway	Provides a checklist, reminder or short summary for later use.
Module recap	Repeats the main message and prepares transition to the next module.

The structure remains consistent across modules, but not mechanical. Each module may require different examples, activities or emphasis, depending on its topic.

23.4 Recommended MOOC unit structure

Each MOOC unit should focus on one clear idea, risk, decision or routine step. A unit should not introduce too many concepts at once.

A simple unit structure normally includes:

Unit element	Recommended use
Unit title	Clear, practical and connected to a recognisable situation.
Short introduction	One or two short paragraphs explaining the purpose of the unit.
Everyday example	A message, post, headline, image, video, form, comment or scenario.
Explanation	Plain-language explanation of the key idea.
Small activity	A decision, comparison, checklist, reflection or matching task.
Knowledge check	Usually 3–5 short questions.
Feedback	Explanation for both correct and incorrect answers.
Takeaway sentence	One practical point to remember.

A learner can finish one unit and understand one practical idea. The aim is not to include everything about the topic in one place.

23.5 Learner-facing language

MOOC content should use clear, direct and respectful language. It should avoid curriculum jargon and unnecessary technical terms.

Use	Avoid
Short sentences.	Long curriculum-style paragraphs.
Everyday examples.	Abstract explanations without context.
“You may see this kind of message...”	“The learner will be exposed to...”
“Before you share, ask...”	“The participant should operationalise...”

Repeated key terms.	Many new terms introduced at once.
Practical routines.	Overly theoretical descriptions.

Technical terms are introduced only when needed and explained through examples.

For example, “algorithm” can be explained as a system that helps a platform decide what to show first or recommend next. “Generative AI” can be explained as AI that can create text, images, audio or video. “Digital footprint” can be explained as traces left by online actions.

The MOOC should not assume that learners understand educational terms such as learning outcome, competence, assessment evidence or micro-credential logic. These ideas guide course design, but they should not dominate learner-facing wording.

23.6 Transforming learning outcomes into learner goals

Each module contains ten operationalised learning outcomes. In the MOOC, these should be translated into clear learner goals and practical tasks. The MOOC does not need to display every outcome in formal curriculum wording. However, every outcome must be covered through explanation, example, activity, quiz, scenario, routine or feedback.

Curriculum learning outcome	Learner-facing transformation
Evaluate the credibility of information sources using contextual cues.	You will practise checking who published information, when it was published and what evidence is provided.
Identify recurring manipulation patterns in political or social media content.	You will learn to notice warning signs such as fear, blame, urgency and missing context.
Apply preventive strategies across platforms and devices.	You will practise what to do before clicking, replying, paying or sharing personal information.
Evaluate ethical responsibilities of digital citizenship.	You will think about how your online actions can affect other people and public discussion.

The learner-facing version is simpler, but it does not weaken the educational meaning.

23.7 Transforming module context into learner motivation

The “Module context” section becomes a short learner-facing explanation of why the topic matters.

A good module opening answers four questions:

Question	Example
What everyday situation does this module address?	“You may receive a message that looks urgent and official.”
Why is this important?	“Some messages are designed to make people react before checking.”
What will the learner practise?	“In this module, you will practise how to pause, check and compare before sharing.”
How does this support autonomy?	“This routine can help you decide more calmly what to do next.”

The module opening does not begin with project background, curriculum development history or institutional explanation. Those belong in the curriculum document, not in learner-facing MOOC content.

23.8 Realistic examples and scenarios

SMART AGE MOOC content should be built around realistic digital situations. Older learners are more likely to understand and remember a concept when it appears in a familiar context.

Useful example types include:

Example type	Possible use
Forwarded message	Disinformation, scams, emotional pressure, responsible sharing.
Social media post	Source checking, framing, manipulation, civic discussion.
Headline	Clickbait, emotional wording, missing context.
Website or online form	Privacy, data sharing, public service use.
Suspicious link	Scam awareness and verification.
AI-generated image or text	AI-content awareness and verification.
Video recommendation	Algorithmic exposure and repeated content.
Comment thread	Respectful communication and digital well-being.
Online campaign or petition	Civic participation and source checking.
Family group message	Sharing, trust, privacy and peer support.

Examples are short and focused. Where possible, they are fictional or simulated, especially when dealing with scams, personal data, health information, political content or public institutions.

23.9 Learner activities

Learner activities should help learners apply what they have learned. In an asynchronous MOOC, activities should be simple enough to complete independently.

Recommended activity types include:

Activity type	Example
Choose the safest action	Learner selects whether to click, check, wait, ignore, report or ask for help.
Identify warning signs	Learner marks urgency, emotional pressure, unclear source or unsafe data request.
Compare two examples	Learner compares two headlines, sources, messages or responses.
Match concept and example	Learner matches a term such as source, evidence, privacy or urgency with an example.
Apply a routine	Learner chooses which step of a routine applies to a situation.
Sort by risk level	Learner sorts examples into safe, uncertain and high-risk categories.
Select respectful response	Learner chooses a calm reply in a communication scenario.
Complete a short reflection	Learner connects the topic with personal digital habits.

Activities avoid complex file uploads, long written assignments or tasks that require manual instructor review. Reflection can be included, but it is designed so that learners benefit from it even when no instructor reads the response.

23.10 Quizzes and answer feedback

Quizzes should be short, practical and connected to realistic situations. They should confirm understanding and help learners practise judgement.

The core question types are:

Question type	Recommended use
Multiple Choice	Choosing safer actions, identifying warning signs, selecting sources or choosing the correct routine.
True/False	Checking understanding of key ideas and common misconceptions.
Gap Fill	Reinforcing key terms, routine steps or short definitions.

Most unit-level checks should contain 3–5 questions. Module-level quizzes may combine several question types and cover the main learning outcomes of the module.

Every question must include answer feedback. Feedback should explain why the answer is correct or why another answer is safer, more accurate or more responsible.

Feedback type	Example
Correct answer feedback	“This is the safer answer because it checks the source before trusting or sharing the message.”
Incorrect answer feedback	“This answer reacts too quickly. A safer step is to pause, check who created the message and compare it with another reliable source.”

Question wording avoids tricks. The aim is not to confuse learners, but to help them practise careful decisions.

23.11 Videos and scripts

Videos should support learning rather than replace all written or interactive content. They are most useful when they introduce a concept, explain a risk, demonstrate a routine or summarise a module.

A useful video structure is:

Video part	Function
Opening situation	Shows a familiar problem or question.
Simple explanation	Explains one concept or risk.
Practical step	Shows what the learner can do.
Short recap	Repeats the main message.

Video scripts should be written before recording. This helps with quality control, translation, captions and transcripts.

Videos should be short, clear and slow enough for older learners. They should avoid fast transitions, crowded screens, small text and unnecessary animation.

23.12 Downloadable and printable takeaways

Each module must include at least one downloadable or printable takeaway. These resources help learners use the module routines outside the MOOC.

Possible takeaways include:

Takeaway type	Use
Routine card	Summarises the main learner routine.
Checklist	Helps learners check a message, source, link, privacy setting or civic campaign.
One-page recap	Repeats the main points of the module.
Personal plan	Supports transfer and continued use.
“What to do if...” guide	Helps learners respond to suspicious or stressful situations.

Takeaways should be short, readable and visually clear. They should use large enough font, strong contrast and simple structure.

23.13 Content density and pacing

A common risk in MOOC development is trying to include too much content. SMART AGE topics are broad, but each unit focuses on one idea that learners can understand and apply.

Content developers should avoid:

Risk	Better approach
Too many new terms in one unit	Introduce one or two key terms and repeat them.
Long theoretical explanations	Use short explanations connected to examples.
Too many examples at once	Use one strong example and one activity.
Overttechnical detail	Focus on what the learner can recognise and do.
Long quizzes	Use short checks with useful feedback.
Platform-specific instructions only	Teach transferable routines that remain useful when interfaces change.

The MOOC should feel manageable. Older learners should be able to complete one unit without feeling that they must master the whole topic at once.

23.14 Content accessibility during production

Accessibility must be considered while content is being written, not only during technical platform development.

Content developers should check:

Accessibility question	Practical implication
Is the text easy to read?	Use short paragraphs, clear headings and plain language.
Is the page visually manageable?	Avoid crowded screens and unnecessary decoration.
Are videos accessible?	Prepare captions and transcripts.
Are instructions clear?	Tell learners exactly what to do next.
Are quizzes easy to understand?	Avoid trick wording and long answer options.
Can key resources be saved or printed?	Provide downloadable takeaways.

More detailed platform accessibility requirements are addressed in Chapter 22 and broader quality criteria in Chapter 26.

23.15 Localisation during content development

Content should be written with localisation in mind. Some examples may not transfer well across countries or languages. During content development, creators should mark which elements may need local adaptation, such as public services, scam examples, civic sources, support links, screenshots, legal references or platform-specific terminology. This refers to MOOC/content-level localisation and does not require changing the shared curriculum architecture.

Detailed localisation guidance is provided in Chapter 24. Chapter 23 only establishes the production rule: MOOC content should be easy to translate, easy to adapt and not dependent on examples that work only in one country.

23.16 Summary

Transforming the SMART AGE curriculum into MOOC content requires more than placing curriculum text online. Each module must become a clear sequence of short, practical and learner-facing units.

A successful MOOC unit includes a recognisable situation, a simple explanation, a manageable activity, a knowledge check, useful feedback and a practical takeaway. The unit supports the relevant learning outcomes while remaining understandable for older learners in an asynchronous online environment.

The goal is not to include as much information as possible. The goal is to help learners understand, practise, receive feedback and transfer what they learn into everyday digital life.

24. Guidance for curriculum translation and MOOC localisation

24.1 Purpose of this chapter

SMART AGE distinguishes between curriculum-level localisation and MOOC/content-level localisation. The curriculum itself remains a shared, transferable and location-neutral educational framework. It defines the common learning pathway, modules, learning outcomes, workload, assessment logic, completion requirements and recognition principles.

Curriculum-level localisation primarily concerns translation, terminology, readability, cultural clarity and preparation for later national adaptation. It ensures that each partner-language version is clear, understandable and usable, while preserving the same curriculum architecture.

The main adaptation of concrete examples, scenarios, public services, support links, screenshots, scam patterns, civic sources and learner-facing activities takes place during MOOC content development. This ensures that all partner versions preserve the same curriculum structure while allowing the MOOC to become meaningful for learners in each national and local context.

This chapter therefore explains how to prepare the SMART AGE curriculum for translation, curriculum-level localisation and later MOOC/content-level adaptation. Broader reuse by other organisations is addressed in Chapter 25. Quality criteria for adaptation and sustainability are addressed in Chapter 26.

24.2 Common elements across all localised versions

All localised versions remain recognisably part of the same SMART AGE curriculum. Localisation makes the curriculum more understandable for learners, but it does not change the core educational architecture.

The following elements remain common:

Common element	Reason
Ten-module structure	Preserves the shared learning pathway.
Programme-level competences	Ensures that all versions develop the same overall learner profile.
Ten learning outcomes per module	Maintains curriculum coherence and assessment alignment.
75-hour workload, approximately 3 ECTS where applicable	Preserves the workload logic of the full pathway.
Learner routines	Provides transferable strategies across all versions.
Assessment logic	Supports comparable evidence of learning.
Completion requirements	Protects transparency of recognition.
Older-learner-oriented learning design	Keeps the curriculum suitable for older learners.
Accessibility principles	Supports learners with different needs and confidence levels.

Localised versions may use different examples, wording, screenshots and support links. However, they support the same learning outcomes and competences.

24.3 Elements for MOOC/content-level localisation

Some elements are not changed in the shared curriculum framework, but are adapted when the curriculum is transformed into learner-facing MOOC content. These elements depend on national, regional or community context.

Element to localise	Examples
Everyday scenarios	Local messaging habits, common platforms, public services and community communication.
Scam examples	Delivery scams, fake banking messages, public service impersonation, pension-related scams or health-related scams.
Civic information sources	National and local institutions, public portals, municipality websites and trusted public information channels.
Support links	Consumer protection, cybercrime reporting, digital support, adult education centres, libraries or older adult organisations.
Screenshots and interface examples	Local-language or simulated examples that do not expose real personal data.
Language and terminology	Natural wording that older learners can understand.
Cultural references	Examples that feel familiar, respectful and non-stigmatising.
Communication channels	Platforms and services commonly used by older learners in the relevant country.

The best localised examples are short, realistic and clearly connected to the intended learning outcome. Localisation does not overload the course with excessive national detail.

24.4 Translation principles

Translation prioritises clarity. A technically correct translation is not useful if older learners cannot understand it.

Recommended translation principles are:

Principle	Application
Use plain language	Avoid long sentences and unnecessary technical terms.
Keep key terms consistent	Use the same translation for recurring terms across modules.
Explain difficult terms	Add short explanations when needed.
Avoid unclear literal translation	Use natural learner-facing wording.
Preserve tone	Keep the language calm, respectful and supportive.
Review quiz wording carefully	Ensure that questions and answers remain clear after translation.
Preserve routines	Keep learner routines recognisable across language versions.
Avoid excessive jargon	Use simple learner-facing questions where formal terms are too abstract.

For example, a curriculum term such as “algorithmic awareness” may need a learner-facing explanation such as: “Why do I keep seeing similar content?” Similarly, “generative AI” is explained through practical examples of text, images, audio or video that may be created or changed by AI.

Translation is therefore treated as an educational task, not only as a linguistic task.

24.5 Localising examples and scenarios

Examples are central to the SMART AGE learning approach. They are recognisable and realistic for older learners.

Localisation does not mean replacing every example. Some examples may work well across countries. Others are adapted or newly created as simulated examples.

When localising examples, content developers ask:

Localisation question	Purpose
Would older learners in this country recognise this situation?	Checks relevance.
Is the platform, service or communication channel familiar?	Checks everyday usefulness.
Does the example reflect common local risks?	Checks practical safety value.
Is the example culturally respectful?	Avoids inappropriate or confusing content.
Does the example preserve the same learning outcome?	Protects curriculum alignment.
Is the example simple enough for MOOC use?	Avoids overload.
Can the example be used without legal, privacy or reputational risk?	Supports responsible content creation.

Localised examples may be based on real digital patterns observed in the country, but they are normally fictionalised or simulated for MOOC use. This reduces legal and privacy risks and avoids giving unnecessary visibility to harmful content.

24.6 Localising civic and public information content

Civic and public information examples are adapted carefully because institutions, public services and trusted information channels differ between countries.

Localised versions may include examples of:

Source type	Possible local adaptation
Public service portals	National or regional e-government services.
Municipality websites	Local public notices and community information.
Health institutions	Reliable health information sources.
Consumer protection bodies	Help with fraud, rights and complaints.
Cybercrime reporting	National or local reporting channels.
Libraries and adult education centres	Local digital support and learning opportunities.
Older adult organisations	Community-based support and peer learning.
Civic information bodies	Reliable sources for participation, consultation or election information where relevant.

The curriculum avoids presenting one single source as sufficient for all questions. Learners should understand that different situations require different checking strategies.

For example, a health claim is checked through reliable health sources. A public service notice is checked through an official public service channel. A local announcement is checked through the municipality or relevant local institution.

24.7 Localising scam and safety examples

Scam patterns differ across countries, but many tactics are similar. They often involve urgency, fear, fake authority, unsafe links, requests for money, requests for personal data or pressure to keep something secret.

Localisation therefore combines two levels:

Level	Description
Common pattern	The underlying scam strategy, such as urgency, impersonation, unsafe data request or emotional pressure.
Local example	The concrete form this may take in a specific country or community.

Examples:

Common pattern	Localised example
Fake delivery message	A message imitating a delivery company commonly used in the country.
Fake bank alert	A message imitating a common national bank or payment service.
Fake public service notice	A message imitating tax, health, pension or municipal services.
Fake family emergency	A message claiming that a relative urgently needs money.
Fake prize or compensation	A message promising benefits, vouchers, refunds or support payments.
Fake technical support	A call or message claiming that the learner's device or account is in danger.
Fake health product	An advertisement or message offering unrealistic health benefits.

The aim is not to teach learners to recognise only one brand, one logo or one message. The aim is to help learners recognise transferable warning signs.

24.8 Localising AI-generated content examples

AI-generated content examples are localised in a careful and non-sensationalist way. Learners are more likely to understand AI-related risks when examples are connected to familiar language patterns, public issues, media formats or everyday situations.

Suitable localised AI examples include:

AI example type	Localisation approach
AI-generated image	Use a fictional local-looking event, place or public situation.
AI-written message	Use familiar communication style or local topic.
Fake endorsement	Use a fictional public figure or generic celebrity-like example.
Voice impersonation	Use a family-emergency scenario without real personal data.
AI-generated public post	Use a fictional community issue or civic topic.
AI-assisted scam message	Use familiar wording from local banking, delivery or public service communication.

AI examples avoid real accusations, real private individuals and misleading use of real institutional identities. Where needed, examples are clearly marked as fictional or simulated.

The learning point remains stable: AI-generated or AI-assisted content can look convincing, but learners still check source, evidence, context and risk before trusting or sharing it.

24.9 Localising privacy and data-protection examples

Privacy and data protection are strongly connected to local digital habits, public services and legal expectations. However, learner-facing content does not become a legal lesson.

Localised examples may include:

Privacy topic	Possible local adaptation
Online forms	Public service, health, library, education or municipality forms used locally.
Identity documents	Nationally relevant forms of identification, described carefully and without real data.
Health information	Local health portals, appointment systems or pharmacy-related examples.
Banking and payment data	Common national payment habits and safety warnings.
Social media visibility	Platforms and communication habits common among older learners.
Location sharing	Local transport, delivery, maps or community applications.
App permissions	Common apps that ask for contacts, camera, microphone, photos or location.

Where data protection rules are mentioned, the focus remains practical. Learners need clear questions: What data is being requested? Why is it needed? Who will see it? Can I share less? Do I need to ask for help?

24.10 Localising learner routines and downloadable materials

Learner routines are among the most transferable elements of the SMART AGE curriculum. They remain recognisable across localised versions, but their wording is natural in each language.

Each localised version reviews:

Routine element	Localisation task
Routine title	Translate clearly and consistently.
Routine steps	Keep the same logic while using natural wording.
Memory version	Make it short and easy to remember in the local language.
Examples	Use local or locally recognisable examples.
Downloadable layout	Ensure that the routine remains readable and printable after translation.
Accessibility	Check font size, contrast, spacing and plain language.

Downloadable materials do not become longer simply because they are translated. If a local language requires longer phrasing, the layout may need adjustment.

The goal is that learners can save or print the material and use it outside the MOOC.

24.11 Localising assessment and feedback

Assessment items must be localised carefully. A quiz question that works in one language may become unclear, too difficult or culturally inappropriate in another.

Localised assessment preserves the same learning purpose and difficulty level.

Assessment element	Localisation requirement
Question stem	Clear, short and understandable.
Answer options	Plausible but not confusing or tricky.
Correct answer	Still clearly correct in the local context.
Incorrect answers	Still useful for explaining common mistakes.
Feedback	Explains the reasoning in plain language.
Scenario	Familiar and culturally appropriate.
Difficulty	Similar level across languages.
Key term	Consistent with module wording.

Machine translation alone is not used for final quiz items without human review. Assessment wording is checked by someone who understands the target language, the learning purpose and the needs of older learners.

Automatic feedback is also localised with care. Feedback remains calm, explanatory and non-shaming.

24.12 Localisation and accessibility

Localisation can unintentionally make materials longer or more complex. This is a risk because some languages require longer phrases, and some technical terms may become harder to understand after translation.

Localised versions are therefore checked for accessibility:

Accessibility check	Guiding question
Sentence length	Are sentences still short enough?
Term clarity	Are difficult terms explained?
Page density	Has translation made the page too crowded?
Quiz readability	Can learners understand the question without rereading many times?
Video captions	Are captions readable and well-timed?
Downloadable materials	Are checklists still simple and printable?
Navigation labels	Are buttons and section names clear?
Font size and contrast	Are display settings or accessible formats still usable?

Accessibility is checked again after translation, not only in the original version.

24.13 Localisation review before publication

Each localised version is reviewed before publication. The review is practical and focused on learner usability.

A localisation review normally includes:

Review step	Focus
Translation review	Accuracy and terminology.
Plain language review	Learner-facing clarity.
Local example review	Familiarity, realism and appropriateness.
Outcome alignment review	Connection with the intended learning outcomes.
Assessment review	Clarity and equivalence of quiz items and feedback.
Accessibility review	Readability, captions, layout, navigation and downloadable materials.
Support-link review	Accuracy and relevance of support links and public sources.
Learner testing	Feedback from older learners where possible.
Final revision	Adjust wording, examples, support links and feedback before release.

This process remains manageable. Its purpose is to protect clarity and relevance, not to create unnecessary complexity.

24.14 Summary

Localisation is essential for SMART AGE because older learners need examples, services, risks and support options that make sense in their own context. A direct translation is not enough.

At the same time, localisation should not change the shared structure of the curriculum. All versions should preserve the ten-module pathway, programme-level competences, module learning outcomes, 75-hour workload, assessment logic, completion requirements, learner routines and older-learner-oriented approach.

Good localisation makes the curriculum more understandable, practical and respectful. It helps learners recognise digital situations from their own lives while still participating in a common SMART AGE learning pathway.

For broader reuse beyond localisation, including use by other organisations, adapted workshops, local courses, OER attribution and recognition outside the SMART AGE MOOC, see Chapter 25.

25. Guidance for reuse

25.1 Purpose of this chapter

The SMART AGE curriculum is developed as the educational foundation for the SMART AGE MOOC. At the same time, it is designed as a transferable educational resource that can support wider adult education, community learning and older-adult digital inclusion.

This chapter explains how adult education organisations, libraries, older adult associations, NGOs, community centres, local authorities and other stakeholders may reuse or adapt SMART AGE materials. It also clarifies the difference between the SMART AGE micro-credential and other educational activities based on SMART AGE.

The purpose of reuse is to increase the long-term value and sustainability of the project results. The curriculum does not remain useful only inside one MOOC platform. It also supports local workshops, guided learning, blended formats, awareness activities, peer-learning sessions and other non-formal adult education activities.

Reuse remains transparent and responsible. Organisations may adapt SMART AGE materials to their learners, languages, examples, timeframes and delivery formats, but they must clearly state what they used, what they changed, who is responsible for the adapted activity and what kind of recognition, if any, is issued.

25.2 Open Educational Resource status and attribution

The SMART AGE curriculum and educational materials developed within the project are intended to function as Open Educational Resources. They may be used and adapted under the Creative Commons licence stated in the project materials.

Any organisation using or adapting SMART AGE materials must acknowledge the source. This applies to use of the full curriculum, selected modules, learner routines, examples, checklists, downloadable materials or MOOC-inspired activities.

A reused or adapted activity clearly states:

Required information	Purpose
That SMART AGE materials were used or adapted	Acknowledges the source.
Which material was used	Clarifies whether the full curriculum, selected modules, routines, examples or checklists were used.
Who adapted or delivered the activity	Identifies the responsible organisation.
What was changed	Makes adaptation transparent.
What recognition, if any, is issued	Prevents confusion with the SMART AGE micro-credential.

A suitable acknowledgement is:

“This activity is based on/adapted from the SMART AGE Micro-Credential Curriculum, developed within the Erasmus+ project Seniors’ Media Awareness & Resilience in the Digital Age. The adaptation and delivery of this activity are the responsibility of [name of organisation].”

Using SMART AGE materials does not automatically make a new course, platform, certificate, badge or training activity a SMART AGE product. Adapted activities must not be presented as SMART AGE products unless this has been authorised by the SMART AGE partnership.

25.3 Possible reuse formats

The modular structure of the curriculum allows different levels of reuse. Organisations may use the full pathway, selected modules, combinations of modules or smaller elements such as routines and checklists.

Possible reuse formats include:

Reuse format	Description
Full learning pathway based on SMART AGE	Implementation of the complete ten-module curriculum with defined workload, outcomes and assessment.
Selected modules	Use of one or more modules for a specific learning need, such as scams, privacy, disinformation or AI-generated content.
Combination of modules	Use of several connected modules to form a shorter thematic learning pathway.
Short workshops	Adaptation of selected module elements into one-off or short community sessions.
Guided group learning	Facilitated learning where participants follow MOOC-inspired materials together.
Blended learning	Combination of online learning, printed materials and face-to-face support.
Local online course	Adaptation of curriculum content into another online learning environment.
Awareness sessions	Use of selected routines, examples or checklists for public outreach.
Peer-learning activities	Use of routines and scenarios in groups of older adults, libraries or community clubs.

All these forms may be useful. However, they must not be described as equivalent to completion of the SMART AGE MOOC unless the official completion requirements and authorisation conditions are met.

25.4 Full reuse of the learning pathway

An organisation may decide to implement the full SMART AGE curriculum as a complete ten-module learning pathway. This may be done online, face-to-face, blended or through guided group learning.

A full implementation based on SMART AGE preserves:

Requirement	Description
Ten-module sequence	All ten modules are implemented in a coherent order.
Indicative workload	The 75-hour workload is retained, or any adjustment is clearly explained.
Programme-level competences	The ten competences remain visible and aligned with the modules.
Module learning outcomes	The ten learning outcomes per module are preserved or responsibly adapted.
Assessment	Evidence of learning is collected through quizzes, tasks, scenarios, reflections or equivalent methods.
Completion criteria	Requirements are clearly communicated to learners.
Localisation	Examples, support links and civic sources are adapted to the local context.
Recognition transparency	Any certificate or confirmation states issuer, scope, workload, learning outcomes and assessment basis.

Even if another organisation implements the full ten-module pathway, it must not present the activity as the SMART AGE MOOC or SMART AGE micro-credential unless this has been authorised by the SMART AGE partnership.

Such implementation may be described as a local programme, course, training activity or learning pathway based on the SMART AGE curriculum. If the organisation issues its own certificate or micro-credential, it is responsible for its own quality assurance, recognition conditions and compliance with relevant national or institutional requirements.

25.5 Reuse of selected modules or module combinations

Partial reuse is valid and may be especially useful in community education. Many organisations may not have the time, staff, platform or learner availability to implement the full 75-hour pathway. They may instead use one module or a combination of modules that responds to a local need.

Examples of selected reuse include:

Local need	Possible SMART AGE module use
Checking online information	Module 1: Information and Media Literacy
Understanding misleading content	Module 2: Disinformation and Manipulation Awareness
Discussing AI-generated media	Module 3: AI-Generated Content Awareness
Understanding repeated recommendations	Module 4: Algorithmic Awareness and Information Exposure
Recognising suspicious messages	Module 5: Digital Safety and Scam Awareness
Protecting personal data	Module 6: Privacy and Data Protection
Reducing digital stress	Module 7: Digital Well-being and Emotional Resilience
Sharing responsibly	Module 8: Responsible Sharing and Communication
Checking civic information	Module 9: Civic and Democratic Participation Online
Building personal digital routines	Module 10: Reflective Digital Autonomy and Transfer

Useful module combinations may include:

Thematic need	Possible module combination
Safer digital judgement	Modules 1, 2 and 5
AI and misinformation	Modules 2, 3 and 4
Personal safety and privacy	Modules 5 and 6
Digital confidence and well-being	Modules 6, 7 and 10
Responsible online participation	Modules 8 and 9
Community resilience	Modules 1, 2, 5, 8 and 9

Partial reuse must clearly state that only selected parts of the curriculum were implemented. It must not be described as completion of the SMART AGE micro-credential.

25.6 Recognition in reused formats

Recognition in reused formats is transparent and proportionate. Organisations that reuse the curriculum may issue their own certificates, attendance confirmations, participation records or local badges, depending on their context.

Any recognition clearly states:

Recognition element	Required clarity
Issuing organisation	Who provides the certificate, badge or confirmation.
Scope	Whether the activity used the full pathway, selected modules, a workshop or a local adaptation.
Workload	Number of hours or approximate learning time.
Topics or modules covered	Which SMART AGE modules, themes or routines were included.
Learning outcomes or competences	What learners were expected to learn or practise.
Assessment method	How learning was checked, if applicable.
Form of participation	Online, blended, face-to-face, guided group learning or another format.
Relation to SMART AGE	Whether the curriculum was used, adapted or referenced.

Recognition must not suggest that a learner has completed the SMART AGE micro-credential unless the SMART AGE MOOC completion requirements have been met.

A short workshop based on one module may issue an attendance certificate. A guided group activity may issue a participation confirmation. A local full course based on the curriculum may issue its own local recognition. These forms of recognition may be valid in their own contexts, but they are not the official SMART AGE micro-credential unless formally authorised and aligned with the official completion model.

25.7 Adapting content for local learners

Organisations reusing the curriculum adapt examples to their own learners. This is especially important when working with older adults in different local, cultural, linguistic or digital environments.

Adaptation may include:

Adaptation area	Example
Local scams	Use scam messages common in the community.
Public services	Refer to national or local public service portals.
Civic information	Use relevant institutions, public sources and support channels.
Media examples	Use familiar media formats and local information sources.
AI examples	Use fictional or simulated examples that feel locally recognisable.
Language	Use clear and natural learner-facing wording.
Support contacts	Add local libraries, adult education centres, consumer protection bodies or trusted services.
Pace	Adjust session length and repetition to learner needs.
Format	Use printed worksheets, group discussion, guided online learning or local online platforms.
Accessibility	Adapt font size, contrast, layout, captions and printable materials where needed.

More detailed localisation guidance is provided in Chapter 24. In reused formats, local adaptation makes learning more relevant without changing the core learning purpose.

25.8 Using SMART AGE materials in workshops and guided learning

The curriculum may be adapted into shorter workshops or guided group sessions. In such formats, organisations select only the most relevant learning outcomes and avoid trying to cover too much too quickly.

A workshop or guided session based on SMART AGE normally includes:

Element	Function
Short introduction	Explains why the topic matters.
One or two realistic examples	Connects learning to everyday life.
Simple explanation	Introduces only necessary concepts.
Practical activity	Helps learners apply the idea.
Key routine	Gives learners something to use after the session.
Short reflection	Connects the topic with personal experience.
Support information	Shows where learners can ask for help.

For example, a two-hour workshop on scams does not attempt to cover all digital safety risks. It may focus on recognising pressure, unsafe links and requests for passwords or codes, then practise the Stop–Check–Verify–Ask Routine.

Guided group learning may be especially useful for older learners who prefer social learning, need technical support or feel more confident when learning with others. The facilitator supports learner autonomy rather than solves every problem for the learner.

25.9 Local online courses based on SMART AGE

Some organisations may adapt the curriculum into their own online course environment. This may be useful if they already operate a learning platform or want to integrate selected SMART AGE modules into existing adult education programmes.

A local online course based on SMART AGE:

Requirement	Explanation
State its relationship to SMART AGE	Learners should know that the course is based on or adapted from SMART AGE materials.
Preserve learning purpose	The course should remain focused on media literacy, digital resilience and digital autonomy.
Use learner-facing language	Curriculum wording should be transformed into accessible online content.
Include activities and feedback	Learners should not only read information; they should practise judgement.
Provide completion information	Requirements should be clear from the start.
Avoid misleading recognition	The course should not claim to be the official SMART AGE MOOC unless authorised.
Provide support information	Learners should know where to get help.
Update examples periodically	Scam, AI, privacy and civic examples may become outdated.

A local online course may be useful, but it must be transparent. Learners must be able to understand whether they are completing the official SMART AGE MOOC or a local course based on SMART AGE materials.

25.10 Minimum information for adapted activities

Any organisation adapting SMART AGE materials provides learners with basic information before the activity begins.

This includes:

Information	Purpose
What will be learned	Clarifies the learning focus.
Which modules or topics are included	Defines the scope.
How long it will take	Defines workload.
How learning will be checked	Explains evidence of learning, if applicable.
What recognition will be issued	Clarifies certificate, badge or attendance confirmation.
Who provides the activity	Identifies the responsible organisation.
How the activity relates to SMART AGE	Explains whether the curriculum is used, adapted or referenced.
Where learners can get support	Provides help options.
What data learners may be asked to provide	Supports privacy and transparency.

This transparency protects learners and supports trust. It also prevents confusion between the official SMART AGE MOOC and other educational activities based on SMART AGE materials.

25.11 Ethical reuse

Organisations reuse the curriculum ethically. Older learners are not treated as incapable, passive or technically deficient. Learning respects their experience, dignity and autonomy.

Ethical reuse means:

Ethical principle	Meaning
Respect	Avoid patronising language or examples.
Autonomy	Support learners to make their own informed decisions.
Privacy	Do not ask learners to share personal stories or data unnecessarily.
Safety	Use simulated examples where real examples could expose people.
Inclusion	Adapt materials for different confidence levels and needs.

Accessibility	Make materials readable, navigable and usable.
Transparency	Be clear about scope, recognition and limitations.
Non-partisanship	Use civic examples to teach judgement, not political persuasion.
Attribution	Reference SMART AGE when materials are used or adapted.
Licence compliance	Follow the Creative Commons licence stated in the project materials.

The curriculum helps older adults participate in digital life with greater confidence. It does not make them feel dependent, ashamed or afraid.

25.12 Common mistakes to avoid

Organisations reusing the curriculum avoid several common mistakes.

Mistake	Why it should be avoided
Presenting partial use as the full SMART AGE micro-credential	This weakens recognition transparency and misleads learners.
Copying curriculum text directly into learner materials	Curriculum language may be too dense for learner-facing use.
Removing activities and assessment completely	Learning becomes information delivery rather than competence development.
Using fear-based examples	Learners may become anxious instead of more confident.
Using too many technical terms	Content becomes harder to understand and apply.
Using outdated screenshots or examples	Learners may learn interface details that no longer apply.
Ignoring local context	Examples may feel irrelevant or confusing.
Treating older learners as one uniform group	Learners differ in confidence, experience, needs and preferences.
Failing to reference SMART AGE	This does not respect the OER and Creative Commons logic of the project materials.
Labelling adapted products as official SMART AGE products without authorisation	This creates confusion about responsibility and recognition.

Responsible reuse requires clarity, proportion and respect for both learners and the original curriculum.

25.13 Summary

The SMART AGE curriculum is designed for the official SMART AGE MOOC, but it is also built for wider educational reuse. Other organisations may use the full pathway, selected modules, module combinations, workshops, guided learning sessions, blended formats, local online courses or awareness activities.

The modular structure of the curriculum makes adaptation possible. Organisations can choose the parts that match their learners' needs and local context. However, this flexibility must remain transparent. Partial use of SMART AGE materials does not constitute completion of the official SMART AGE micro-credential.

Responsible reuse preserves the curriculum's learning purpose, older-learner-oriented approach, practical relevance, learning outcomes, learner routines, assessment alignment, accessibility and transparent recognition. Local examples and delivery formats may change, but the educational purpose remains stable.

SMART AGE materials are Open Educational Resources under the Creative Commons licence stated in the project materials. Organisations using or adapting them must reference SMART AGE, state what they have adapted and avoid presenting their own systems, courses or certificates as official SMART AGE products unless authorised.

This approach increases the sustainability of SMART AGE. It allows the curriculum to support older learners beyond the official MOOC and to become a practical resource for adult education, libraries, older adult organisations and community learning.

26. Quality criteria for adaptation, recognition and sustainability

26.1 Purpose of this chapter

This chapter provides practical quality criteria for implementing, adapting and sustaining SMART AGE materials. It is intended for the SMART AGE MOOC, project partners and organisations that may use or adapt SMART AGE materials in their own educational settings.

The purpose is not to repeat the curriculum structure, MOOC implementation model, localisation guidance or reuse rules described in previous chapters. Instead, this chapter functions as a practical quality check.

It helps answer four questions:

Quality question	Purpose
Is the implementation aligned with the SMART AGE curriculum?	Protects educational coherence.
Is the learning suitable for older learners?	Protects accessibility and relevance.
Is recognition transparent?	Protects learners and credibility.
Can the material remain useful over time?	Supports sustainability.

Quality assurance is proportionate. A short local workshop does not need the same quality system as the SMART AGE MOOC. However, every use of SMART AGE materials remains clear, respectful, accessible and transparent.

26.2 Core quality principle

The core quality principle is:

Adaptation is acceptable when it improves relevance, access and learner support, but not when it weakens the educational logic of SMART AGE.

Local examples, language, delivery format, support structures and learning activities may change. The following elements remain protected:

Core element	Quality requirement
Learning purpose	The activity supports media literacy, digital resilience and reflective digital autonomy among older learners.
Older-learner-oriented approach	The activity respects older learners' experience, confidence levels and learning needs.
Learning outcomes	Content and activities remain connected to relevant SMART AGE learning outcomes.
Learner routines	Practical routines remain visible and usable.
Assessment or evidence of learning	Recognition is based on more than attendance or passive access, unless it is clearly only an attendance confirmation.
Workload transparency	Learners know the expected time commitment.
Recognition transparency	Certificates, badges or completion records state exactly what they represent.
Attribution	SMART AGE is referenced when materials are used or adapted.

Quality does not mean that all implementations must look identical. It means that learners receive a coherent, useful and honest learning experience.

26.3 Curriculum alignment checklist

Before publishing or delivering SMART AGE-based learning, the following alignment questions are checked.

Curriculum alignment question	Yes / Needs revision
Is the learning purpose clearly connected to media literacy, digital resilience or digital autonomy?	
Are the selected modules, topics or routines clearly identified?	
Are relevant SMART AGE learning outcomes preserved or responsibly adapted?	
Are the activities connected to the stated learning outcomes?	
Are examples realistic and connected to older learners' digital lives?	
Are learner routines included where relevant?	
Is the workload stated clearly?	
Is the form of participation clear: online, blended, face-to-face, guided group learning or workshop?	
Is assessment or evidence of learning described clearly, if recognition is issued?	
Is the relation to SMART AGE clearly stated?	

If several answers are “Needs revision”, the activity is revised before delivery.

26.4 Older-learner-oriented quality checklist

SMART AGE materials are not only accurate. They are usable by older learners with different levels of confidence, experience and support.

Older-learner-oriented quality question	Yes / Needs revision
Is the language clear and respectful?	
Are technical terms explained through examples?	
Are learning steps manageable?	
Does the activity avoid unnecessary overload?	
Does the tone avoid fear, shame or patronising language?	
Does the material build confidence as well as risk awareness?	
Are examples familiar or easy to recognise?	
Are learners encouraged to pause, check, compare and ask for help when needed?	
Are activities practical rather than purely theoretical?	
Are printable or downloadable takeaways provided useful?	

A older-learner-oriented approach does not mean simplifying the topic to the point where it loses meaning. It means making complex digital situations understandable, manageable and practically useful.

26.5 Accessibility checklist

Accessibility is checked in every implementation format. This applies to the MOOC, translated versions, local online courses, printed materials and workshops.

Accessibility question	Yes / Needs revision
Is the text readable and well spaced?	
Are headings clear and consistent?	
Is the visual design calm and not overcrowded?	
Is there sufficient contrast?	
Are font sizes suitable for older learners?	
Are videos captioned where possible?	
Are transcripts provided for essential audio or video content?	
Are instructions short and clear?	
Are quiz questions easy to understand?	
Are downloadable materials printable and readable?	
Are platform navigation and buttons easy to identify?	
Are accessibility options, such as font-size adjustment or contrast settings, considered where technically possible?	

Accessibility is checked after translation and localisation, because translated text may become longer, denser or harder to read.

26.6 Assessment and feedback checklist

Assessment supports learning. It helps learners practise judgement, apply routines and receive useful feedback.

Assessment quality question	Yes / Needs revision
Is assessment connected to the stated learning outcomes?	
Are questions based on realistic digital situations?	
Are question types technically feasible in the selected format?	
Are Multiple Choice, True/False and Gap Fill used where appropriate for the MOOC?	
Are questions clear and not trick-based?	
Does each question have feedback for correct and incorrect answers?	
Does feedback explain the reasoning behind the answer?	
Does feedback avoid blame or embarrassment?	
Are learners allowed to try again where appropriate?	
Is the completion threshold or requirement clear?	

In workshops or guided learning, assessment may be informal, oral or activity-based. If recognition is issued, the type of assessment or evidence is clear.

26.7 Recognition transparency checklist

Recognition must accurately describe what the learner completed. This is especially important because SMART AGE materials may be used in different formats.

Recognition question	Yes / Needs revision
Is the issuing organisation clearly named?	
Is the title of the recognition clear?	
Is the learner identified according to relevant data-protection rules?	
Is the date of issue included?	
Is the scope of learning clearly stated?	
Is the workload stated in hours and, where applicable, in ECTS?	
Are learning outcomes or competences listed or referenced?	
Is the assessment method stated?	
Is the form of participation stated?	
Is the relation to SMART AGE clearly described?	
Is it clear whether this is official SMART AGE recognition or local recognition based on SMART AGE materials?	
Is the recognition not overstated?	

The official SMART AGE micro-credential is linked to successful completion of the full official MOOC, including all ten assessed modules and required assessment activities. Other forms of recognition may be valid in their own context, but they are labelled accurately.

26.8 Reuse and attribution checklist

Organisations using or adapting SMART AGE materials respect the Open Educational Resource and Creative Commons logic stated in the project materials.

Reuse quality question	Yes / Needs revision
Is SMART AGE acknowledged as the source?	
Is it clear which materials were used or adapted?	
Is the adapting or delivering organisation clearly identified?	
Are changes or adaptations described where relevant?	
Is the Creative Commons licence respected?	
Is there no misleading use of SMART AGE branding?	
Is it clear that the adapted activity is not the official SMART AGE MOOC unless authorised?	
Is any certificate or badge clearly issued by the adapting organisation, unless formally authorised otherwise?	
Are learners informed about the scope and limits of the adapted activity?	

This checklist is used together with Chapter 25, which provides more detailed guidance for reuse by other organisations.

26.9 Localisation quality checklist

Localisation makes SMART AGE materials more relevant and understandable in a specific context while preserving the curriculum logic.

Localisation question	Yes / Needs revision
Is the translation clear and natural for older learners?	
Are key terms translated consistently?	
Are examples relevant to the national or local context?	
Are scam examples realistic but safely fictionalised or simulated where needed?	
Are public service examples accurate?	
Are civic information sources appropriate and non-partisan?	
Are support links current and relevant?	
Are quiz questions still clear after translation?	
Is feedback still supportive and understandable?	
Has accessibility been checked after localisation?	

This checklist is used together with Chapter 24, which provides more detailed localisation guidance.

26.10 Sustainability checklist

Sustainability means that SMART AGE materials remain useful, updateable and credible after initial publication.

Sustainability question	Yes / Needs revision
Are materials stored in editable formats where appropriate?	
Are examples easy to update when they become outdated?	
Are scam, AI, privacy and civic examples reviewed periodically?	
Are public service and support links checked periodically?	
Are screenshots reviewed when platforms change?	
Are learner routines stable enough to remain useful across platform changes?	
Is there a clear version date or revision date?	
Are updates documented?	
Can local organisations adapt examples without changing the core learning purpose?	
Are learner or facilitator feedback mechanisms considered?	

The most sustainable elements of SMART AGE are not fixed screenshots or platform-specific instructions. The most sustainable elements are the learning outcomes, competences, learner routines, scenarios and judgement strategies.

26.11 Risk checklist

The following risks are reviewed before implementation or reuse.

Risk	Quality response
Content overload	Shorten units, reduce the number of concepts and use clearer examples.
Excessive technical detail	Focus on practical judgement and safer action.
Fear-based learning	Balance risks with confidence and positive digital participation.
Patronising tone	Respect learners' experience and autonomy.
Weak assessment	Add simple tasks, scenarios or quizzes linked to outcomes.
Poor localisation	Replace examples that do not fit the local context.
Inaccessible design	Improve readability, navigation, captions, contrast and layout.
Outdated examples	Review scam, AI, platform and civic examples.

Overstated recognition	Clarify scope, workload, assessment, issuer and relation to SMART AGE.
Partial use presented as full completion	State clearly what was completed and what was not.
Unclear source attribution	Add proper SMART AGE acknowledgement.
Lack of support information	Add relevant help options, especially for high-risk topics.

Risk review is practical. It leads to concrete revisions, not only to formal documentation.

26.12 Minimum quality review before publication or delivery

Before any SMART AGE-based activity is published, delivered or issued with recognition, the following minimum quality review is completed.

Minimum review area	Required check
Educational coherence	Learning purpose, outcomes, activities and assessment are aligned.
Target group suitability	Content is appropriate for older learners.
Accessibility	Materials are readable, navigable and usable.
Local relevance	Examples, sources and support links fit the context.
Assessment	Learning is checked appropriately where recognition is issued.
Recognition	Scope, workload, issuer and relation to SMART AGE are clear.
Attribution	SMART AGE is referenced when materials are used or adapted.
Sustainability	Materials can be updated and revised when needed.

This review may be simple, but it is explicit. Even a short workshop checks whether learners understand what they are doing, why it matters and what kind of recognition, if any, they will receive.

26.13 Summary

Quality in SMART AGE is not only a formal project requirement. It is the way to protect the usefulness, credibility and sustainability of the curriculum.

A quality SMART AGE implementation is aligned with the curriculum, suitable for older learners, accessible, practical, transparent and responsibly attributed. It supports media literacy, digital resilience and reflective digital autonomy without overwhelming learners or overstating recognition.

The SMART AGE MOOC will remain the complete 75-hour pathway leading to the SMART AGE micro-credential after successful completion of all required activities. Other organisations may use and adapt SMART AGE materials, but they must do so transparently, with clear attribution, accurate recognition and respect for the needs of older learners.

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Appendices

Appendix 1 – Learning outcome clusters mapped to DigComp 3.0

Purpose of the appendix

This appendix summarises how the SMART AGE learning outcome clusters are connected to DigComp 3.0. It shows that the curriculum remains aligned with a recognised European digital competence framework, while adapting it to the everyday digital situations and learning needs of older adults.

DigComp 3.0 is used as a reference framework, not as a direct course outline. SMART AGE does not follow the DigComp competence areas one by one. Instead, it reorganises relevant digital competences into ten practical learning outcome clusters. Each cluster becomes one module in the SMART AGE Micro-Credential Curriculum.

This mapping complements Part B of the curriculum. In Part B, each of the ten clusters is translated into one module, one programme-level competence and ten operationalised module learning outcomes. This means that the full curriculum contains ten modules and one hundred operationalised module learning outcomes. The appendix does not repeat all one hundred outcomes. Its purpose is to show how the ten-cluster structure remains connected to DigComp 3.0 and why the adaptation is appropriate for older learners.

The mapping also shows that SMART AGE uses DigComp 3.0 in an age-responsive and media-aware way. The focus is not only on digital tool use, but on interpretation, judgement, safety, resilience, responsible participation and transfer into everyday digital life.

A1.1 Mapping of SMART AGE clusters to DigComp 3.0

SMART AGE cluster / module	Main DigComp 3.0 connection	SMART AGE adaptation focus
1. Information and Media Literacy	Area 1: Information search, evaluation and management; Area 5: Problem identification and solving	Focuses on digital information, media messages, sources, credibility, evidence, framing and context. The emphasis shifts from finding information to interpreting and assessing information in everyday media situations.
2. Disinformation and Manipulation Awareness	Area 1: Information search, evaluation and management; Area 2: Communication and collaboration; Area 5: Problem identification and solving	Makes misinformation, disinformation, emotional pressure and manipulation a dedicated learning area because of their relevance for older learners. The focus is on judgement before reacting or sharing.
3. AI-Generated Content Awareness	Area 3: Digital content creation; Area 1: Information search, evaluation and management; Area 5: Problem identification and solving	Shifts the focus from producing digital content to recognising, interpreting and verifying AI-generated or AI-assisted text, images, audio and video.
4. Algorithmic Awareness and Information Exposure	Area 1: Information search, evaluation and management; Area 2: Communication and collaboration; Area 5: Problem identification and solving	Helps learners understand how feeds, search results, recommendations and platform personalisation influence what they repeatedly see online.
5. Digital Safety and Scam Awareness	Area 4: Safety, wellbeing and responsible use; Area 5: Problem identification and solving	Focuses on scams, phishing, suspicious links, impersonation, pressure tactics and unsafe requests for money, passwords, codes or personal data.

6. Privacy and Data Protection	Area 4: Safety, wellbeing and responsible use; Area 2: Communication and collaboration	Translates privacy and data protection into everyday decisions about personal data, visibility, sharing, settings, app permissions and digital footprints.
7. Digital Well-being and Emotional Resilience	Area 4: Safety, wellbeing and responsible use; Area 5: Problem identification and solving	Connects digital competence with emotional awareness, digital overload, stress, manipulation pressure and healthier digital habits.
8. Responsible Sharing and Communication	Area 2: Communication and collaboration; Area 1: Information search, evaluation and management; Area 4: Safety, wellbeing and responsible use	Focuses on checking before sharing, respecting privacy, reducing possible harm and communicating responsibly in digital spaces.
9. Civic and Democratic Participation Online	Area 2: Communication and collaboration; Area 1: Information search, evaluation and management; Area 5: Problem identification and solving	Connects digital competence with public information, civic participation, campaign checking, respectful discussion and resistance to manipulation, polarisation and misleading civic content.
10. Reflective Digital Autonomy and Transfer	Area 5: Problem identification and solving; all other areas as supporting references	Consolidates the full pathway by helping learners transfer learned routines to new digital situations and continue learning with autonomy and appropriate support.

A1.2 Why SMART AGE does not copy the DigComp structure directly

DigComp 3.0 provides a broad European reference for digital competence. It is useful for identifying relevant competence areas and for keeping the curriculum connected to European competence policy. However, SMART AGE is not a general digital competence course for all adults. It is a older-learner-oriented media and digital resilience curriculum.

For this reason, the curriculum adapts DigComp 3.0 in three ways.

Adaptation	Meaning for SMART AGE
From competence areas to everyday situations	Older learners usually encounter digital challenges as practical situations: a suspicious message, a misleading headline, a scam link, a repeated recommendation, an AI-generated image or a confusing public service form.
From technical operation to judgement	The curriculum focuses on checking, comparing, interpreting, deciding, protecting data, managing pressure and asking for help when needed.
From isolated skills to transferable routines	Learners are supported through repeated routines that can be reused when platforms, tools and examples change.

This adaptation does not weaken DigComp alignment. It makes the framework usable for a specific target group and educational purpose.

A1.3 Cross-cutting role of problem solving

In SMART AGE, problem solving is treated as a transversal competence across all modules. It is not limited to fixing technical problems.

For older learners, problem solving often means recognising uncertainty, pausing before reacting, comparing sources, choosing a safer response, protecting personal data, avoiding unsafe links, managing emotional pressure or asking for help when needed.

This reflects the reality that digital challenges usually appear as combined situations. A suspicious message, for example, may involve source credibility, emotional pressure, possible fraud, privacy risk and the need to decide whether to click, reply, share, verify or stop.

Problem solving therefore appears throughout the curriculum. It is visible in learner routines such as Personal Credibility Routine, Pause–Check–Compare Routine, Stop–Check–Verify–Ask Routine, Personal Data Protection Routine and Personal Digital Autonomy Plan.

A1.4 Media and Information Literacy connection

The curriculum is also informed by Media and Information Literacy principles. This strengthens the DigComp-based structure by adding a critical, civic and interpretative perspective.

Media and Information Literacy supports the SMART AGE curriculum in five main ways:

MIL contribution	Relevance for SMART AGE
Critical evaluation of information	Supports source checking, evidence, context and comparison.
Understanding media messages	Supports awareness of framing, purpose, audience, format and influence.
Responsible communication	Supports ethical sharing, respectful discussion, privacy awareness and awareness of possible harm.
Civic participation	Supports informed engagement in digital public life and responsible use of civic information.
Resilience to misinformation	Supports recognition of misleading content, manipulation, disinformation patterns and emotional pressure.

This MIL layer is important because many SMART AGE topics are not purely technical. Learners do not only need to operate devices or platforms. They need to understand how information is created, framed, distributed, promoted, interpreted and shared.

A1.5 From clusters to modules, competences and outcomes

The SMART AGE curriculum uses a consistent structure:

Curriculum level	Function
Learning outcome cluster	Defines the main thematic and competence area.
Curriculum module	Translates the cluster into a structured learning module.
Programme-level competence	Summarises the broad competence developed through the module.
Ten module learning outcomes	Operationalise what the learner is expected to recognise, understand, decide or apply.
Learner activities and assessment	Provide evidence that the outcomes have been achieved or meaningfully engaged with.
Learner routine	Supports transfer into everyday digital life.

This structure creates a clear bridge between DigComp 3.0, the SMART AGE competence framework and the official MOOC implementation.

The detailed module learning outcomes are listed in the module descriptions in Part B. They provide the practical basis for content development, learner activities, assessment tasks and completion criteria.

A1.6 Summary

The SMART AGE curriculum is aligned with DigComp 3.0, but it adapts the framework to the specific needs of older learners. The ten learning outcome clusters translate digital competence into practical, media-aware and older-learner-oriented learning areas.

This mapping supports the coherence, quality, assessment alignment and transferability of the curriculum. It shows how the SMART AGE learning pathway remains connected to European competence policy while focusing on everyday situations that older adults may recognise: checking information, recognising manipulation, interpreting AI-generated content, understanding repeated

exposure, avoiding scams, protecting privacy, managing digital stress, sharing responsibly, participating in civic life and transferring learned routines to new contexts.

The full curriculum develops ten programme-level competences through ten modules and one hundred operationalised module learning outcomes. These outcomes are assessed through practical activities, quizzes, scenario-based tasks, learner routines and final completion requirements in the official SMART AGE MOOC.

Appendix 2 – Executive summary of learning outcomes review

Purpose of the appendix

This appendix summarises the external review of the SMART AGE learning outcomes framework. The review was conducted as part of the quality assurance process for Curriculum Development.

The purpose of the review was to check whether the adapted learning outcomes were relevant for older learners, aligned with the aims of the SMART AGE project, suitable for later MOOC development and clear enough to support assessment and recognition.

The reviewed framework consisted of ten learning outcome clusters. Each cluster included ten outcomes, resulting in 100 learning outcomes in total. These clusters later became the basis for the ten curriculum modules in Part B.

This appendix does not repeat all 100 outcomes. The full module-level operationalisation is presented in Part B of the curriculum.

A2.1 Review context

The SMART AGE learning outcomes were developed by adapting DigComp 3.0 to the learning characteristics, media environments and digital resilience needs of older learners. The outcomes were not organised as a direct copy of the DigComp structure. Instead, they were grouped into ten practical clusters reflecting the digital and media situations that older adults encounter or may encounter in everyday life.

The review focused on whether this adapted structure was:

Review focus	Guiding question
Relevant	Are the outcomes meaningful for older learners?
Standards-aligned	Are they connected to DigComp 3.0 and media literacy principles?
Clear	Are they understandable and usable for curriculum development?
Practical	Can they be translated into learning activities and MOOC content?
Assessable	Can they support quizzes, scenarios, reflection and evidence of learning?
Suitable for micro-credential logic	Can they support transparent completion and recognition?

The review was important because the learning outcomes form the foundation of the curriculum. If the outcomes are not suitable, the later module structure, assessment model and MOOC implementation cannot be coherent.

A2.2 Reviewer profile

The review included 12 external experts and stakeholders with experience in areas relevant to SMART AGE.

Reviewer perspectives included:

Area of experience	Relevance for SMART AGE
Adult education	Suitability for lifelong learning and non-formal education.
Education of older adults	Sensitivity to older learners' needs and learning conditions.
Media literacy	Critical interpretation of media messages and misinformation.

Digital education	Alignment with digital competence development.
E-learning	Suitability for later MOOC development.
Civic education and community learning	Relevance for responsible participation and social inclusion.
Library, information or public learning contexts	Source evaluation, information access and learner support.
Accessibility and inclusion	Usability for learners with different confidence levels and needs.

This diversity was important because SMART AGE is not a purely technical digital skills curriculum. It combines media literacy, digital resilience, AI awareness, online safety, civic participation and older adult learning.

A2.3 Overall review result

The external review confirmed that the SMART AGE learning outcomes framework was a strong and relevant basis for curriculum development.

The main positive findings were:

Positive finding	Meaning for curriculum development
Strong relevance to older learners	The outcomes addressed realistic digital and media challenges faced by older adults.
Clear thematic structure	The ten-cluster model was understandable and suitable for further development.
Alignment with DigComp 3.0	The framework remained connected to a recognised European digital competence reference.
Strong media literacy focus	The outcomes addressed credibility, manipulation, misinformation, framing and responsible communication.
Inclusion of AI-generated content	The framework responded to an important and emerging digital challenge.
Suitability for online learning	The outcomes could be transformed into MOOC modules, units, quizzes and activities.
Potential for micro-credential recognition	The outcomes provided a basis for assessment and completion criteria.
Transferability	The framework could support both the official MOOC and wider adult education use.

The review therefore validated the main direction of the curriculum.

A2.4 Main strengths identified

Reviewers particularly valued that the framework moved beyond basic technical instruction. It recognised that older adults need support not only in using digital tools, but also in interpreting, evaluating and responding to digital and media content.

The main strengths identified were:

Strength	Explanation
Age-sensitive adaptation	The outcomes were adapted to older learners rather than copied from a general framework without modification.
Focus on judgement	The framework prioritised interpretation, checking, decision-making and responsible action.
Practical relevance	The outcomes could be connected to everyday situations such as messages, posts, scams, health claims, public information and online discussions.
Misinformation resilience	The framework directly addressed misleading content, manipulation and emotional pressure.
AI awareness	The outcomes included awareness of AI-generated content and its risks.
Civic and social relevance	The framework recognised digital participation as part of public, community and democratic life.
Transfer orientation	The outcomes supported routines and strategies that learners can apply beyond one platform or example.

These strengths were retained in the curriculum structure.

A2.5 Main recommendations from reviewers

Reviewers also provided recommendations for improvement. These recommendations helped transform the learning outcomes framework into a more usable curriculum and MOOC foundation.

Reviewer recommendation	Curriculum response
Simplify language	The curriculum uses clearer explanations, learner-facing wording and practical examples.
Reduce density	Modules are divided into manageable units and avoid too many concepts at once.
Add everyday examples	Learning is connected to familiar situations such as suspicious messages, social media posts, scams, health claims, online forms and civic information.
Clarify assessment	The curriculum includes assessment focus, suitable question types, feedback principles and completion criteria.
Strengthen MOOC suitability	The curriculum supports transformation into short online units, videos, quizzes, routines and downloadable takeaways.
Avoid overtechnical focus	The curriculum focuses on judgement and safer action rather than specialised technical knowledge.
Support accessibility	The curriculum emphasises readable design, plain language, repetition and accessible learner materials.
Support localisation	Part C provides guidance for adapting examples, scenarios, support links and civic sources.

The recommendations did not require changing the basic ten-cluster structure. They required clearer presentation, stronger learner orientation, more everyday examples and more explicit assessment logic.

A2.6 How the review informed the curriculum

The review findings directly influenced the final structure of the SMART AGE curriculum.

Review implication	Curriculum decision
The ten-cluster structure was relevant	The curriculum retained ten clusters and translated them into ten modules.
Outcomes needed to remain visible	Each module includes ten operationalised learning outcomes.
Learners need clear structure	Each module follows a common structure with summary, context, outcomes, units, assessment and tailored guidance.
Language needed simplification	Learner-facing explanations and practical examples were strengthened.
Assessment needed clearer connection to outcomes	Assessment focus and suitable MOOC question types were added to each module.
MOOC development needed feasibility	Activities were designed for asynchronous learning and automatic feedback where technically possible.
Localisation needed support	Dedicated guidance was added for national and local adaptation.
Recognition needed transparency	The curriculum clearly links the SMART AGE micro-credential to completion of the full MOOC pathway.

In this way, the review functioned as both validation and refinement.

A2.7 Representation of the 100 learning outcomes

The reviewed framework contained ten clusters with ten outcomes each. This structure is preserved in the curriculum.

Cluster	Corresponding module	Number of module learning outcomes
1	Information and Media Literacy	10
2	Disinformation and Manipulation Awareness	10
3	AI-Generated Content Awareness	10
4	Algorithmic Awareness and Information Exposure	10
5	Digital Safety and Scam Awareness	10
6	Privacy and Data Protection	10

7	Digital Well-being and Emotional Resilience	10
8	Responsible Sharing and Communication	10
9	Civic and Democratic Participation Online	10
10	Reflective Digital Autonomy and Transfer	10
Total	Full SMART AGE curriculum	100

The 100 outcomes are operationalised in Part B. They provide the basis for module content, learner activities, assessment and completion requirements.

A2.8 Summary of review-based refinements

The following refinements were made after the review:

Area refined	Refinement made
Structure	The ten-cluster framework was translated into a ten-module pathway.
Visibility of outcomes	Each module includes ten learning outcomes.
Competence clarity	Each module is connected to one programme-level competence.
Learner orientation	Module language was made clearer and more practical.
Examples	Everyday examples and scenarios were strengthened.
Assessment	Assessment focus, question types and feedback principles were clarified.
MOOC readiness	Guidance was added for transforming modules into learner-facing online units, activities, quizzes, feedback and downloadable takeaways.
Localisation	Guidance was added for adapting content to partner languages and contexts.
Recognition	Completion and micro-credential logic were clarified.

These refinements strengthened the curriculum without changing its core educational direction.

A2.9 Overall conclusion

The external review confirmed that the SMART AGE learning outcomes framework is relevant, coherent and suitable for curriculum development. Reviewers supported its focus on misinformation, AI-generated content, digital safety, privacy, well-being, responsible communication, civic participation and digital autonomy among older learners. The review also identified necessary improvements: simpler language, more everyday examples, clearer assessment criteria, stronger MOOC suitability and better support for localisation. As a result, the reviewed framework was transformed into a structured micro-credential curriculum with ten modules, ten programme-level competences and 100 operationalised module learning outcomes. The review fulfilled an important quality assurance function. It confirmed the relevance of the framework and prepared it for curriculum implementation, MOOC development and later recognition of completion.

Following the development of the complete curriculum, a second external review was conducted to evaluate the curriculum as a whole. The results of this curriculum review are presented in Appendix 3.

Appendix 3 – Executive summary of curriculum review

Purpose of the appendix

This appendix summarises the external review of the complete SMART AGE Micro-Credential Curriculum. The review formed the second stage of the quality assurance process. The first stage assessed the adapted learning outcome framework; the second stage assessed the complete curriculum after the ten-module pathway, workload, assessment logic and MOOC implementation guidance had been developed.

The purpose of the curriculum review was to confirm whether the curriculum was coherent, relevant and appropriate for older learners and whether it provided a credible educational basis for the SMART AGE MOOC. The review also examined alignment with DigComp 3.0 and Media and Information Literacy principles, the clarity of learning outcomes, workload and assessment, the connection with realistic digital situations, localisation potential and readiness for asynchronous self-paced learning.

A3.1 Reviewer profile

Five external reviewers contributed to the curriculum evaluation. Together, they brought experience in adult education, education of older adults, media and information literacy, digital competence, curriculum development, accessibility, inclusion and online learning.

Reviewer	Organisation	Relevant perspective
Sabine Wiemann	BUPNET GmbH, Germany	Adult education; education of older adults; media and information literacy; digital competence; curriculum development; assessment
Helena Matavž	Andragoški zavod Maribor, Slovenia	Adult education
Aleksandar Novak	Kultivator, Croatia	Media and information literacy; digital competence
Dubravka Cilar	Association of Pensioners of the City of Čakovec, Croatia	Education of older adults; accessibility and inclusion; direct work with older people
Dorian Penšek-Rader	Bildungshaus Retzhof, Austria	Media and information literacy; digital competence; curriculum development; online learning and instructional design

Dorian Penšek-Rader is employed by Bildungshaus Retzhof, the project applicant organisation, but he is not a member of the SMART AGE project team and was not involved in developing the curriculum. His assessment was therefore treated as an external expert review of the curriculum-development work. All five reviewers gave permission for their names and organisations to be listed in the review documentation.

A3.2 Overall quantitative result

The review produced a strongly positive overall assessment. The evaluation form contained 13 Likert-scale statements covering Part A – Project Mandate and Curriculum Framework and Part B – SMART AGE Micro-Credential Curriculum. With five completed reviews, the dataset contained 65 individual ratings.

Indicator	Result
Overall mean	4.57 / 5
Part A mean	4.60 / 5
Part B mean	4.55 / 5
Positive Likert ratings (Strongly agree + Agree)	61 / 65 (93.8%)
Strongly agree	42 / 65 (64.6%)
Agree	19 / 65 (29.2%)
Neutral	3 / 65 (4.6%)
Disagree	1 / 65 (1.5%)

Strongly disagree	0 / 65 (0%)
Reviewers evaluating the curriculum as good	5 / 5 (100%)
Reviewers evaluating it as appropriate for older adults	5 / 5 (100%)

Four reviewers considered the curriculum ready without substantive revisions. One reviewer supported the curriculum but recommended several targeted improvements. The strongest results concerned the clarity of purpose and scope, alignment with DigComp 3.0 and Media and Information Literacy principles, coherence of the ten-module pathway, relevance of the module themes, clarity and assessability of learning outcomes, and the curriculum's support for confidence, autonomy and responsible digital participation.

A3.3 Main strengths identified by reviewers

The review confirmed several stable strengths of the SMART AGE curriculum:

- a coherent progression from the competence framework and learning outcomes to modules, activities and assessment;
- strong coverage of contemporary issues relevant to older adults, including misinformation, AI-generated content, scams, privacy, digital well-being and responsible participation;
- a respectful and confidence-building approach that avoids stereotypical or deficit-based treatment of older learners;
- consistent use of DigComp 3.0 enriched by Media and Information Literacy principles;
- a strong focus on interpretation, judgement, transfer and digital autonomy rather than memorising technical rules; and
- a curriculum architecture that provides a credible basis for an asynchronous and self-paced MOOC.

A3.4 Main recommendations

The review did not identify a need to redesign the ten-module architecture or add new modules. The recommendations concentrate on how the curriculum should be implemented in the MOOC so that learners with different levels of digital experience can use it comfortably and successfully.

Review recommendation	Implementation in the SMART AGE MOOC
Keep workload and pace flexible	The 75-hour pathway remains the notional curriculum reference, while actual learner time may vary. The MOOC will support self-paced progression and beta testing will examine actual time-on-task.
Use plain learner-facing language	Technical and abstract terms are introduced gradually, explained through examples and supported by visible vocabulary help or a short glossary where useful.
Use authentic and locally recognisable examples	National versions use familiar media environments, public services, civic sources, scam patterns, messages and communication contexts, while preserving selected cross-national examples.
Make support visible	The MOOC will provide clear help information and the partnership will consider peer-support, facilitator-assisted or blended deployment options for learners who need additional support.
Test older-learner-oriented design in practice	Beta testing checks navigation, comprehension, workload, accessibility, repetition, confidence, completion patterns and the level of support required.
Use representation of older adults thoughtfully	Where pedagogically appropriate, MOOC examples may include media representations of ageing, framing and stereotypes, reinforcing the curriculum's non-stereotyping approach.

A3.5 From review findings to collaborative MOOC design

The curriculum review confirms the existing educational architecture and provides a practical design brief for the next phase of SMART AGE. The recommendations are not treated as a separate list of

corrections attached to the curriculum. They will be incorporated directly into MOOC design, content production, localisation and testing through the joint work of all project partners.

The partnership will therefore use the common curriculum as the stable educational foundation while jointly developing the learner-facing experience. This includes decisions about module and unit structure, wording, terminology support, examples, videos, interactive activities, assessment feedback, navigation, accessibility, local adaptation and learner support. Beta testing with older learners will provide the final evidence needed to refine these design choices before publication.

This approach preserves the coherence of the ten-module curriculum while ensuring that the final MOOC responds to the practical concerns raised by reviewers and to the diversity of older learners across the partner countries.

A3.6 Project benchmark and conclusion

The SMART AGE project requires a minimum of four external expert reviews and sets a target that at least 60% of reviewers rate the adapted framework and final curriculum as good or appropriate. The curriculum review included five external reviewers. All five rated the curriculum as good and all five rated it as appropriate for older adults. The project benchmark is therefore met and exceeded.

Overall, the review confirms that the SMART AGE curriculum is a strong, coherent and relevant basis for translation, localisation and MOOC development. Its ten-module pathway, learning outcomes, competence alignment and autonomy-oriented approach remain validated. The review recommendations strengthen the next implementation phase by focusing attention on learner-facing language, flexible pacing, authentic examples, terminology support, accessible navigation and appropriate learner support.

The external review therefore fulfils both a validation and a developmental function: it confirms the quality of the curriculum and provides shared guidance that all project partners carry forward into the design, localisation and beta testing of the SMART AGE MOOC.

Appendix 4 – Best practice integration matrix

Purpose of the appendix

This appendix explains how selected good practices from the SMART AGE Best Practices Compendium informed the development of the SMART AGE Micro-Credential Curriculum.

The Compendium collected educational resources, tools, methods and project examples relevant to media literacy, digital literacy, online safety, AI awareness, civic participation and education of older adults. These good practices were not copied directly into the curriculum. Instead, they were analysed as practical references that could help shape the curriculum's learning design, module structure, learner routines, assessment approach, localisation guidance and MOOC implementation model.

The purpose of this appendix is to show how the curriculum is connected to practical educational experience from other initiatives, while still remaining a coherent SMART AGE learning pathway.

This appendix draws on the SMART AGE Best Practices Compendium listed on the [project web page](#).

A4.1 Integration approach

The good practices were used selectively. Their value for SMART AGE was assessed according to their relevance for older learners and for the curriculum's focus on media literacy, misinformation, AI-generated content, digital safety, privacy, digital well-being, responsible communication, civic participation and reflective digital autonomy.

The integration followed five principles:

Principle	Meaning for SMART AGE
Adapt, do not copy	Good practices informed the curriculum, but were adapted to SMART AGE goals, target group, ten-module structure and 75-hour workload, approximately 3 ECTS where applicable.
Prioritise older learners	Methods were selected for their usefulness in older-learner-oriented learning: plain language, slower pacing, repetition, confidence-building, accessibility and familiar examples.
Focus on everyday situations	Good practices supported scenarios based on messages, posts, scams, privacy choices, public information, digital stress, AI-generated content and online communication.
Use transferable routines	The curriculum prioritises stable routines and decision checklists that remain useful when platforms, interfaces and examples change.
Preserve curriculum coherence	Good practices were integrated only where they supported the SMART AGE learning outcomes, programme-level competences, module logic, assessment approach and recognition model.

This selective integration ensures that SMART AGE is informed by existing experience without becoming a collection of disconnected activities.

A4.2 Best Practice Integration Matrix

Good practice group	Examples of sources	Main transferable feature	Integration into SMART AGE curriculum
Older-adult-focused misinformation and media literacy resources	FakeNews&Elders; DIGITELD; ETM Fake News; Break the Chain	Accessible explanations of fake news, disinformation, manipulation, deepfakes, source checking and reflection before sharing.	Informed Modules 1, 2, 3 and 8, especially credibility checking, emotional pressure, AI-related caution and responsible sharing.
Older adult digital inclusion and trainer guidance	DIGITALIATORS; ICT4Elders; SIDAL; SAFE; proADAS	Older-adult-centred methodology, slower pacing, repetition, guided support, confidence-building and connection with everyday life.	Influenced the learning design principles, the tone of all modules, short unit structure, supportive feedback and MOOC accessibility guidance.
Adult digital and media literacy curricula	WOWSA; CUMILA; Information Matters; ML@Curriculum	Modular structure, guided activities, blended learning, reflection, privacy content, public service orientation and practical digital tasks.	Supported the decision to design SMART AGE as a structured pathway with modules, units, practical scenarios, quizzes, routines and downloadable takeaways.
Digital safety and scam-prevention resources	New Methods and Forms of Cybernetic Security for Seniors; Samen Veilig Online; Digitalni Heroji 30++; Vodič za srebrne surfere	Practical guidance on scams, phishing, unsafe links, fake websites, passwords, privacy and safer online behaviour.	Informed Modules 5 and 6, especially scam warning signs, verification routines, privacy decisions and safer responses to suspicious requests.
AI literacy and age-friendly AI resources	AILit Framework; Age-Friendly AI	Awareness of AI-generated content, synthetic media, AI limitations, trust, inclusion and responsible interpretation.	Informed Module 3 and Module 10, especially the decision to focus on verification and human judgement rather than unrealistic AI detection.
Responsible communication, civic participation and peer learning resources	DIGITOL Toolkit; SUM Toolkit; media literacy organisations and networks	Responsible sharing, peer support, civic participation, community learning and reusable learner-facing tools.	Informed Modules 8, 9 and 10, as well as downloadable routines, civic information checking and transfer beyond the course.

A4.3 Main curriculum design effects

The good practices influenced the curriculum at several levels.

Design area	Contribution to SMART AGE
Learning design	Supported short steps, clear language, repetition, realistic examples, reflection, confidence-building and autonomy with support.
Target group adaptation	Reinforced the need to treat older learners as diverse adults with life experience, not as a uniform group of beginners.
Content selection	Reinforced the importance of misinformation, disinformation, AI-generated content, algorithms, scams, privacy, well-being, responsible communication and civic participation.
Module structure	Confirmed the value of a structured ten-module pathway in which each module develops one broad programme-level competence.
Learning outcomes	Supported the decision to operationalise the ten learning outcome clusters through 100 module-level outcomes.
Assessment	Supported short quizzes, scenario-based tasks, practical decisions, reflection prompts, feedback and evidence of learning.
Learner routines	Supported checklists and routines that learners can use outside the course.
MOOC implementation	Supported short units, automatic feedback, visible progress, downloadable takeaways and accessible learner-facing design.
Localisation	Reinforced the need to adapt examples, public services, scam patterns, civic sources and support links to national contexts.
Sustainability	Supported responsible reuse by adult education organisations, libraries, NGOs, older adult associations and community centres.

The good practices therefore influenced both the educational content and the practical implementation model. They helped ensure that the curriculum is not only competence-based, but also usable in real adult education contexts.

A4.4 Examples of specific curriculum influence

The following examples show how good practices influenced specific SMART AGE modules and routines.

Module	Curriculum influence from good practices
1. Information and Media Literacy	The Personal Credibility Routine reflects the emphasis across several good practices on source checking, comparison, evidence and context.
2. Disinformation and Manipulation Awareness	The Pause–Check–Compare Routine reflects approaches that combine misinformation awareness with emotional reflection and responsible sharing.
3. AI-Generated Content Awareness	The AI awareness approach extends existing materials on deepfakes and manipulated media toward newer generative AI challenges. It avoids promising that learners can always detect AI-generated content and instead focuses on source, context, evidence and verification.
4. Algorithmic Awareness and Information Exposure	The Information Diversity Routine reflects the need to help learners notice repeated exposure, personalisation and narrow information environments without technical overload.
5. Digital Safety and Scam Awareness	The Stop–Check–Verify–Ask Routine reflects practical cybersecurity and scam-prevention materials for older adults. It focuses on pressure tactics, unsafe links, impersonation and official verification.
6. Privacy and Data Protection	The Personal Data Protection Routine reflects good practice attention to privacy, oversharing, visibility, app permissions and informed choices about personal data.
7. Digital Well-being and Emotional Resilience	The Pause for Digital Well-being Routine reflects the importance of emotional safety, digital overload, confidence-building and non-shaming learner support.
8. Responsible Sharing and Communication	The Think Before You Share Routine reflects digital citizenship and responsible communication approaches. It connects accuracy, privacy, emotion, audience, impact and choice.
9. Civic and Democratic Participation Online	The Responsible Civic Participation Routine reflects good practice attention to civic information checking, campaign transparency, respectful discussion and resistance to polarisation.
10. Reflective Digital Autonomy and Transfer	The Personal Digital Autonomy Plan reflects peer-learning and lifelong-learning practices that help learners continue applying strategies beyond a course.

These examples show that the good practices did not simply add topics to the curriculum. They influenced how the curriculum teaches judgement, transfer and everyday application.

A4.5 Contribution to older-learner-oriented learning design

The Compendium confirmed several principles that are especially relevant for older learners.

Older-learner-oriented principle	How it appears in SMART AGE
Learning starts from familiar situations	Modules use examples such as messages, posts, links, forms, videos, comments, public service notices and civic campaigns.
Language is clear and practical	The curriculum avoids unnecessary technical detail and uses learner-facing MOOC language.
Repetition supports confidence	Key checking routines appear across modules and are reinforced through activities and takeaways.
Learners need time to reflect	Modules include reflection prompts, self-assessment and personal planning.
Support builds autonomy	Learners are encouraged to ask for help when needed, but also to make their own informed decisions.
Digital risks are not taught through fear	Modules balance risk awareness with positive participation and confidence-building.

Examples are localisable	Part C provides guidance for adapting examples, scams, civic sources, support links and communication habits.
Accessibility must be built in	MOOC guidance includes readable design, captions, transcripts, downloadable materials and accessibility options.

These principles are visible throughout the curriculum, not only in one module. They help ensure that the curriculum remains suitable for older learners with different levels of digital confidence.

A4.6 Contribution to MOOC design

The Compendium also informed the transformation of the curriculum into an asynchronous MOOC.

Relevant design lessons included:

MOOC design lesson	SMART AGE application
Avoid long, text-heavy online lessons	Curriculum modules will become shorter MOOC units.
Use practical examples	MOOC content will include messages, posts, forms, images, links, comments and scenarios.
Provide feedback	Quizzes include automatic feedback for correct and incorrect answers.
Make progress visible	The MOOC will show learners what they have completed and what remains.
Support independent learning	Instructions, feedback and downloadable routines work without continuous instructor presence.
Use accessible media	Videos are short, captioned, transcript-supported and visually clear.
Provide takeaways	Learners can save or print routines and checklists.
Localise examples	National versions adapt examples and support links.

These lessons shaped Part C of the curriculum, especially the chapters on MOOC implementation, transformation of curriculum into MOOC content, localisation and reuse.

A4.7 Contribution to assessment and evidence of learning

Good practices also supported the curriculum's assessment approach. They showed that older learners benefit from simple, practical and supportive assessment formats.

The SMART AGE assessment approach therefore prioritises:

Assessment feature	Link with good practices
Short quizzes	Supports manageable learning and avoids overload.
Scenario-based questions	Connects assessment with real digital situations.
Multiple Choice, True/False and Gap Fill	Keeps the MOOC technically feasible and learner-friendly.
Feedback for every answer	Supports independent asynchronous learning.
Non-shaming tone	Reduces anxiety and supports confidence.
Practical decisions	Checks whether learners can choose safer actions, not only remember terms.
Learner routines	Provides evidence that learners can apply the key strategies.
Reflection prompts	Supports transfer from course examples to personal digital habits.

This assessment model is aligned with the micro-credential logic of the curriculum. Learners receive recognition for completing a structured pathway and engaging with defined outcomes, not simply for opening materials or spending time online.

A4.8 Contribution to localisation and reuse

The Compendium showed that media literacy and digital safety education must be adapted to local contexts. Scam patterns, public services, civic information sources, communication habits and support structures differ between countries and communities.

This informed the localisation and reuse guidance in Part C.

Localisation or reuse lesson	SMART AGE application
Examples feel familiar	National versions use locally recognisable scams, services, civic sources and communication channels.
Materials remain adaptable	The curriculum uses transferable routines rather than fixed platform instructions only.
Local organisations can support access	Libraries, adult education providers, NGOs, older adult associations and community centres can reuse selected materials responsibly.
Reuse is transparent	Organisations state whether they use the full curriculum, selected modules or adapted workshop materials.
Attribution is necessary	SMART AGE materials are referenced when used or adapted.
Recognition is not overstated	Partial use must not be presented as completion of the SMART AGE micro-credential.

This supports the sustainability of SMART AGE while protecting the credibility of the official MOOC and micro-credential.

A4.9 Limits of best practice integration

The Compendium was used as a source of educational inspiration and design evidence, but it was not treated as a fixed curriculum model. The SMART AGE curriculum required its own structure because it has a specific target group, workload, micro-credential logic and MOOC implementation model.

The integration therefore had several limits:

Limit	Meaning
Good practices were not copied directly	Activities, examples and methods were adapted to SMART AGE aims and learners.
Not every good practice was suitable for the MOOC	Some methods may work well in facilitated workshops but not in an asynchronous course.
Some examples may become outdated	Scam, AI, platform and civic examples need periodic review.
Technical activities were simplified	The curriculum focuses on judgement and decision-making, not advanced technical operation.
National examples require localisation	A practice from one country may need adaptation before use elsewhere.
Partial reuse remains distinct from micro-credential completion	Good practices support modular adaptation, but SMART AGE recognition remains linked to the full official MOOC.

Recognising these limits helps prevent mechanical transfer. The curriculum uses good practices critically and selectively.

A4.10 Summary

The SMART AGE Best Practices Compendium helped transform the curriculum from a competence framework into a practical learning pathway for older adults. It informed module topics, older-learner-oriented learning principles, learner routines, assessment formats, MOOC design, localisation guidance and reuse principles.

The good practices confirmed the value of clear language, realistic scenarios, repetition, guided reflection, accessibility, confidence-building and practical decision-making. They also reinforced the need to address misinformation, AI-generated content, scams, privacy, digital well-being, responsible communication and civic participation as connected parts of digital resilience.

The SMART AGE curriculum does not copy any single good practice. It integrates lessons from several sources into a coherent ten-module micro-credential pathway with ten programme-level competences and one hundred operationalised module learning outcomes.

This approach supports both quality and sustainability. The official SMART AGE MOOC will be a complete 75-hour learning pathway, equivalent to approximately 3 ECTS where applicable, while SMART AGE materials can also be reused responsibly as Open Educational Resources by other organisations, provided that the source is acknowledged and that adapted activities are not presented as the official SMART AGE micro-credential unless authorised.

Appendix 5 – KPI compliance matrix

A5.1 Purpose of the matrix

This appendix shows how the SMART AGE curriculum supports the main project commitments defined in the application and amended Annex. It connects the curriculum, the MOOC implementation and the evidence collected for project reporting.

The matrix is not a separate evaluation report. It is a practical compliance tool for partners, reviewers and MOOC developers. Some indicators are already covered at curriculum level. Others are evidenced during MOOC production, localisation, beta testing and dissemination.

A5.2 Compact KPI Compliance Matrix

KPI area	Project requirement	Curriculum / MOOC compliance evidence
DigComp adaptation	Adapt DigComp to media literacy, misinformation and AI-generated content for older learners.	The curriculum uses DigComp 3.0 as the main reference framework and adapts it into ten SMART AGE learning outcome clusters focused on older adults' everyday digital and media situations.
Media literacy focus	Strengthen older adults' ability to critically assess digital content.	Module 1 addresses information and media literacy directly. Other modules reinforce credibility checking, framing, responsible sharing and civic interpretation.
Misinformation resilience	Support learners in recognising misinformation, disinformation and manipulation.	Module 2 focuses on disinformation and manipulation awareness. Checking routines are repeated across the curriculum.
AI-generated content	Help learners navigate AI-generated media.	Module 3 focuses on AI-generated content awareness. AI-related risks are also linked to verification, trust, civic discourse and responsible sharing.
Algorithmic awareness	Address personalised information exposure and platform influence.	Module 4 focuses on algorithmic awareness, filter bubbles, recommendation systems and information diversity.
Modular curriculum	Develop a modular micro-credential-based curriculum.	The curriculum contains ten modules. Each module is linked to one learning outcome cluster and ten operationalised learning outcomes.
Workload	Provide a coherent learning pathway of 75 hours / approximately 3 ECTS where applicable.	The ten assessed curriculum modules together represent 75 hours. Orientation and closing activities may support the MOOC but are not counted within the 75-hour workload.
Learning outcomes	Define clear and assessable outcomes.	The curriculum contains 100 module-level learning outcomes, organised as ten outcomes per module.
Good practice integration	Integrate best practices, tools and approaches in media literacy for older adults.	Appendix 4 explains how selected good practices informed the curriculum, learning design, activities, assessment and localisation principles.
Peer review	Ensure quality, relevance and effectiveness through external review; minimum four external expert reviews and at least 60% rating the adapted	Quality assurance was completed in two stages. The learning outcome framework was reviewed by 12 external experts and stakeholders (Appendix 2). The complete curriculum was subsequently reviewed by

	framework and final curriculum as good or appropriate.	five external reviewers (Appendix 3). In the curriculum review, 5/5 reviewers (100%) rated the curriculum as good and 5/5 (100%) rated it as appropriate for older adults; 93.8% of all Likert-scale ratings were positive. Review recommendations are carried forward into collaborative MOOC design, localisation and beta testing.
MOOC readiness	Prepare the curriculum for asynchronous online learning.	Part C explains how the curriculum is transformed into learner-facing MOOC content, including short units, videos, quizzes, activities, feedback and progress tracking.
Videos	Include videos in the MOOC content.	The MOOC guidance defines short, clear and accessible videos with captions or transcripts as the standard. Video production is documented through a module-by-module inventory.
Quizzes and assessment	Include quizzes, interactive exercises and assessment tasks.	Each module includes assessment logic. MOOC implementation uses technically feasible question types: Multiple Choice, True/False, Gap Fill and Answer Feedback.
Automated feedback	Support independent learning in an asynchronous MOOC.	The curriculum requires feedback after answers, including feedback for both correct and incorrect responses.
Accessibility	Ensure that the MOOC is suitable for older learners.	The MOOC guidance includes readable text, clear navigation, captions, transcripts, simple instructions, downloadable materials and predictable structure.
Localisation	Translate and localise the curriculum and MOOC into partner languages.	The curriculum includes localisation guidance. Partners adapt examples, public services, scam patterns, civic sources and support links to national contexts.
Beta testing	Test the MOOC with older learners.	The MOOC guidance requires beta testing with older learners, including checks of navigation, language, workload, accessibility, feedback and completion logic.
Beta testing sample	Test the MOOC with older learners in partner countries.	The implementation phase documents the number of beta testers, country distribution, age group, completion status and feedback. Minimum targets are defined before beta testing.
Completion logic	Define transparent completion requirements.	The curriculum defines completion of all ten modules and required assessments as the basis for official SMART AGE recognition.
Completion / certificate rate	Monitor whether learners can complete the MOOC and obtain recognition.	LMS analytics record module completion, assessment completion, final reflection completion and certificates issued. The beta testing report includes completion rate and certificate rate.
Micro-credential recognition	Issue recognition only after successful completion of the full pathway.	Module badges are used where supported by the platform, but they are not separate SMART AGE micro-credentials. The official micro-credential is linked to the full ten-module pathway.
Reuse and sustainability	Enable other organisations to reuse the curriculum responsibly.	The curriculum may be reused as an Open Educational Resource, but adapted courses must clearly state their issuer, workload, assessment method and relation to SMART AGE.
Dissemination support	Provide a clear project output for communication and rollout.	The curriculum offers clear descriptions of target group, modules, competences, workload and benefits that can support project website, newsletters, events and promotional materials.

A5.3 Evidence collected during implementation

Implementation area	Recommended evidence
Curriculum approval	Final curriculum version, version history, partner approval record.
Framework alignment	DigComp mapping, MIL alignment notes, review comments.
MOOC structure	Course map, screenshots, module list, unit structure, platform settings, progress-tracking setup.
Video production	Video inventory, scripts, captions, transcripts, upload records.

Quizzes and feedback	Question bank, answer feedback examples, LMS export or screenshots.
Interactive activities	Scenario tasks, checklists, reflection prompts, downloadable routines.
Accessibility	Accessibility checklist, platform review, beta tester comments.
Localisation	Translated versions, localisation checklist, national example matrix.
Beta testing	Participant log, country distribution, age-group overview, survey results, LMS analytics, completion data, revision log.
Completion and recognition	Completion rules, certificate template, issued certificate log, completion analytics.
Dissemination	Website analytics, social media reports, event evidence, stakeholder feedback.

A5.4 Key implementation risks

Risk	Mitigation
The curriculum is copied into the MOOC as long text.	Transform curriculum content into short learner-facing units, examples, activities and feedback.
Videos become too long or too numerous.	Use short, focused videos with captions and transcripts. Each video explains one concept, risk, routine or scenario.
Module completion is confused with micro-credential recognition.	Use clear wording: “Module completed” or “Progress saved”, not “Micro-credential achieved”.
Quizzes test definitions only.	Use scenario-based questions that test judgement, safer decisions and transfer to everyday situations.
Localisation is treated only as translation.	Adapt examples, scams, support links, public services and civic sources to national contexts.
Beta testing checks only technical functionality.	Also test clarity, confidence, navigation, workload, accessibility, feedback and completion logic.
Reporting evidence is collected too late.	Define evidence files, responsible partners and storage locations before MOOC production and beta testing begin.

A5.5 Minimum checklist before MOOC publication

Review question	Status
Are all ten curriculum modules included in the MOOC?	
Is the 75-hour workload clearly communicated?	
Are all module learning outcomes addressed through content, activity or assessment?	
Does each module include videos, quizzes, activities, assessment and downloadable or printable takeaways according to the agreed MOOC design?	
Does each quiz question include feedback for correct and incorrect answers?	
Are activities suitable for asynchronous learning without continuous instructor support?	
Are progress tracking and completion requirements clear?	
Is the official SMART AGE micro-credential issued only after completion of the full pathway?	
Are captions, transcripts and downloadable materials provided where needed?	
Have localised versions been checked for clarity and cultural relevance?	
Has the MOOC been beta tested with older learners?	
Has beta testing feedback been documented and used for revision?	
Can completion, certificate, participation and learner-feedback data be collected for reporting?	
Are issued certificates or recognition records stored in a way that supports project reporting?	

A5.6 Closing note

The matrix shows that the SMART AGE curriculum covers the main educational and methodological commitments of the project. It provides a clear basis for DigComp adaptation, micro-credential design, MOOC development, assessment, localisation, recognition and reuse. The remaining evidence is collected during implementation. This includes MOOC production records, accessibility checks, localised versions, beta testing results, completion data, issued certificate records and dissemination analytics.

