

# **MEMORY IN LATER LIFE**

## **Learning – Supporting – Developing**

### **PROJECT HANDBOOK**



**Published by the partners of the Memory in Later Life Project  
Grundtvig Learning Partnership 2012 – 2014**



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**[The Handbook is written in such a way that it need not be read sequentially]**

## Partner organisations in “Memory in Later Life” Project

Stowarzyszenie Akademia Pełni Życia im. Joanny Boehnert, Poland



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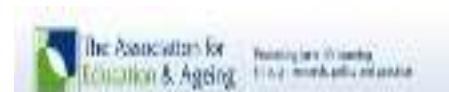
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This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



## Introduction: Memory in Later Life

### Context

The increasing ageing of the population is a key issue that confronts most European countries. Forecasts about demographic development show that in the future a majority of citizens in Europe will be over 55 years old.

This increase in longevity will, on the one hand, offer new opportunities and perspectives for older people after retirement and, on the other, will give societies the opportunity of using the wisdom and experience of older people for the benefit of all. Programmes of learning in later life will therefore be important both for individuals and for societies, especially those adapted to the needs and potentialities of older people.

Memory problems are often considered as one of the most important obstacles to learning in later life and are frequently presented by older people as a reason for not undertaking learning activity. There is a large body of research into memory and ageing (as the references in Chapter 4 of this Handbook indicate). The research suggests not only a broad range of difference between older individuals in terms of the effect of ageing on memory but also large variations in the effects of age on different kinds of memory. Certainly, there is no automatic impact of decline in the quality of life and intellectual activity of older people. However, the literature does suggest that significant problems are the negative and distrustful attitudes of older people towards their own memories and their frequent lack of knowledge about how to support, develop and use their memories. Indeed, some writers describe a vicious circle in which avoiding intellectual activity causes more problems with memory, which, in its turn, decreases the amount of intellectual activity and so on.

Moreover, teachers and other professionals working with older people do not always know how the memory works and how to enhance older people's ability to learn by applying memory rules and methods. Sometimes very simple means can be used to achieve significant results. This is because memory rules normally reflect the way our brain is functioning and using them makes the learning process more "natural" and, in this way, more effective and easy. After the first success with memory recall, an older person is encouraged to do more – and (because of the specificity of brain functioning) – the probability for the next success grows.

*(See more on these topics in source 29 in the Appendix)*



## What then is memory and what can be done about it?

At the end of the Project which has given rise to this Handbook, a conference was held in the United Kingdom. The talks given by the three main speakers were summarised in a report (*Source 29 in the Appendix*). The conference audience of older people began the day watching colourful illustrations and video simulations of brain cell activity. These demonstrated that remembering is a physical process involving electrical firing and chemical flows between the 100 billion neurons that are present in our brains. Further videos showed the plasticity of the brain throughout life – including later life - and how it can respond to experience and stimuli and rewire itself, if necessary, to function better (see *Sources 30 and 31 in the Appendix*). The speakers showed that what we learn and what we remember are stored in long-term memory which is not a single entity but is distributed across different areas of the brain. There is a key organ called the hippocampus which acts as a sort of 'gateway' for new knowledge. We know that the chemical flows released by associations made between new knowledge and things we already know or have experienced promote better remembering through stronger cell connections. The same is true of the recall of good or happy memories and of memories associated with strong emotion.

So this audience of older learners heard about these and other aspects of the physical basis of memory. They learned that memory is not a mystery and that memory changes are not causes for fear. A physical process can be understood and, as time passes, more research means that more is understood. We can build on what we know about memory, accept that there will be some changes with age but that there are ways in which any negative changes can be compensated for or made irrelevant.



The remainder of the conference day in the UK explored the many options and influences that can interact, mediate, re-direct, control or counter-act changes to memory connected to ageing and improve memory in later life. Speakers mentioned and discussed, for example, life-style, diet, physical exercise, sociability and intellectual and learning activity.

Essentially, such options and influences are the agenda of this Handbook

## What is this Handbook and what is it not?

The Handbook is the product of an EU-funded partnership project but its aims are different from those of a project report. It is not an academic treatise on memory nor is it a book on memory research. It is not a compendium of memory tricks and techniques nor is it an ‘improve your memory’ training course. It is not describing a particular theoretical approach to memory nor is it advocating a set of remedies for those convinced that they have poor memories. It probably touches on aspects of all those alternatives from time to time but, essentially, it is an attempt to produce something useful for its key audience, older people. So it contains accounts of memory approaches, techniques and rules which have been tried out on the Project and highlights those which seem to be most useful and interesting. And it is more: it places those accounts in context. It shows how over one hundred older people from six countries came in parallel to explore memory in later life from a range of viewpoints and what they experienced and what they thought. Some entered the Project anxious about their memory, some were curious, some sceptical, some relatively knowledgeable, some expectant and some positive Over a period of two years, the project covered a lot of ground and generated a considerable quantity of documents sources, exercises, data, illustrative material, summaries and recommendations. These all grew organically from the journey of this international company of older people, as they navigated their ways individually, in national teams and as the whole international group through the challenges and mysteries which the topic of memory in later life put before them.

This Handbook contains just some of those documents, sources, illustrative material and recommendations. The Project had to be selective; it had to choose what to disseminate and what it would be most useful to share with others. It not only decided that its main target audience would be older people but also that tutors of older people and other professionals who work with older people should be secondary targets. These decisions affected the choice of material to include and the accompanying context and explanations that are provided. But, overall, we have also tried to make this Handbook useful and interesting for anyone who wants to explore the topic of memory in later life in the ways adopted by the Project





The Handbook has four chapters and an Appendix. The first chapter tells the story of the origins, aims and progress of the Project and who the Project partners were. The second chapter describes what the older learners did, what the activities of the Project were and hence the context from which the Project sources and recommendations came. In the third chapter are the older learners' recommendations on the most useful and interesting memory approaches, techniques and rules which they tried out. The fourth chapter is the shortest but contains a considerable list of references to books, articles, visual material and websites – in both original languages and in English and brought together by the six partners – on the topics of memory, memory and learning and memory in later life. The Appendix, the largest part of this Handbook, contains a selection of 32 Project sources, which are now shared with readers. They should be consulted in parallel with the text in order to benefit fully from the content of the Handbook.

### **How should this Handbook be used?**

It is not necessary to read this Handbook as a regular book, one section sequentially after the other. You can read the sections in any order; or just read some; or not read the whole of any – just pick and choose any of the contents which catch your eye. Keep it to hand, as it were (as far as you can with something which disseminated on the internet) and dip into it when it seems useful. That is why it is called a Handbook.

The selection of materials and resources in the Handbook are frequently cross-referenced in the text of the Handbook. They can be accessed at <http://tinyurl.com/mhguwlg>.



## Chapter 1 The Project: origins, aims and ambitions

### What were the origins of the Project?

The project “Memory in Later Life – Learning – Supporting – Developing” had its origins in the work of a Polish organisation, the Fullness-Of-Life Academy Association, in Krakow. For several years before the Project began, there had been focus in the Polish organisation on problems of memory in later life. Sometimes working with the Jagiellonian University, the Fullness-Of-Life Academy had organised memory training courses and innovative seminars for older people from all over Poland and Europe. This experience led the Association to become the proposer and eventual coordinator of this Project.

The proposal, written in the early part of 2012, was for a six partner project to be funded by the European Community Grundtvig Learning Partnership programme. This programme was intended in particular for organisations in the fields of adult education and lifelong learning which are new to international work and/or for organisations which are not used to working with each other. A key purpose of the funding was to encourage international mobility and the cross-European sharing of experience by representatives of organisations visiting each other and learning about each other’s work. It was held to be crucial that learners, students and course members were part of this international exchange so that, whatever their age, they could be a part of a shared European enterprise and the extension of European understanding. The Project proposal took these requirements very seriously and they explain much of its structure and approach.

A Grundtvig Learning Partnership needed to be formed around a joint programme of work which could be accomplished in a two year period. This partnership took the topic of “Memory in Later Life” as the theme of its programme of work and expressed its approach to the theme in the subtitle “learning – supporting – developing”. The thrust of the programme was to be towards both “the classroom and private life” as was expressed in the objectives included in the proposal.

### What were the objectives?

In the Project proposal, the main objective of the Project was described as:

*to investigate, analyse, improve, test and describe various practical memory and mnemonic rules, methods and techniques which might be implemented by teachers and seniors. These would be used both in the classroom and in private life to facilitate the learning and teaching of various subjects (such as languages, ICT etc.) and also to support personal development and well-being.*



The proposal also made special mention of associated objectives:

- to develop seniors' perspectives on memory and to help them to use their memories more effectively,
- to investigate, to bring together and to build on the “private methods” which older learners and their teachers use for supporting memory.
- to pool from the partner countries the practical knowledge relevant to memory in later life which can be found in proverbs, jokes, literature, films, drama, art etc.

Thus, the Project’s programme of work would begin from the twin foundations of existing memory techniques and methods, already used by older learners to support memory and the exploration of what the Project came to call the “practical” or “hidden” knowledge which filtered from various cultural sources in each of the six societies represented by the partners participating in the Project.



## Ambition

The ambition of the Memory in Later Life project was considerable and it grew as the Project developed. Among the key ambitions were to:

- i) undertake an interdisciplinary and practical approach to memory problems in later life
- ii) use older peoples' personal experience of memory as a foundation of the work
- iii) explore and use cultural manifestations of memory (from films, literature etc.)
- iv) find and adapt materials concerning memory problems available from the Internet, books and other publications
- v) make recommendations on memory activities, approaches and methods to both older learners and teachers of older learners
- vi) involve older learners as active partners and participants in the Project as much as possible.

The ambition of the partners was to make a difference in the chosen areas of memory in later life, which would be a key not only to the learning of older people but to the conduct of their lives. They began from the assumption that the planned sequence of programmed discussions and



activities involving older learners and teachers of older people would be a fertile and stimulating source of both information and ideas. There are memory training courses offered for older people in educational institutions across Europe but they do not necessarily base their approach on the broad perspective of the memory problems perceived or experienced by older people. The demonstration alone of mnemonic tricks or rote- learned methods which are difficult to apply is not sufficient. This project was to show there was great benefit in a wider discussion and exploration of memory in later life which uses perspectives and experiences derived from older people themselves.

The partners' belief that knowledge and assumptions about memory functioning and memory rules and methods was to be found not only in academic papers but also in daily life and in cultural (so-called "hidden") sources everywhere led to considerable ambition. It would be ambitious to start the Project with an exercise enquiring into participants' personal and "private" ways of coping with daily memory problems. These could be valuable sources for supporting memory in the educational process and older people's use of them needed to be analysed, adapted and implemented. But it would have to be done with care and tact. It would be unfortunate to begin the Project in ways re-forcing any doubts people might have about memory.

Certainly it would be fascinating for Project participants to explore and discuss "hidden knowledge" about memory contained in proverbs, literature, films and even art and other cultural formats. It might be, to some extent, original and could make a real contribution. However, it would be challenging for coordinators and others to facilitate such explorations and required the clear establishment of aims, parameters and evaluative method. The partnership was carefully assembled to include a range of knowledge, experience and cultural diversity that could accomplish and enhance this work.

The Project was aiming to concern itself not only with memory in the daily lives of older people but also with how memory was regarded and supported in learning programmes and classrooms. It seemed clear that teachers of older people should understand about memory processes and the application of memory rules and methods. It would be desirable that they consider how such processes and methods could be incorporated into different learning programmes and into the teaching of different subjects. Teachers and tutors have different preferred teaching and learning styles and Project partners were to argue that they need to examine how they can adapt these to the perceptions of, and inhibitions about, memory which particular groups of older learners may have. But this, also, was a significant ambition.

Ambition was necessary. Memory is what makes us all individual; it constitutes our identity, our unique personality. That is why it was so important to consider it from the point of view of individuals and their circumstances and not simply as a "tool" or even as a "faculty". Memory changes in later life; the key ambition was to explore this with older people and to identify the ways in which it can continue to reinforce identity and to enhance the quality of life.



## What happened?

The Project was funded to begin on August 1 2012 and to complete its work on 31 July 2014.

It was structured around a sequence of six international meetings which took place at, roughly, two or three monthly intervals. The first was in Krakow, Poland in October 2012 and the last in Lancaster, UK in June 2014. The partners each hosted one meeting. The meetings were attended by the national coordinators and by a number of older learners and teachers from each partner. The numbers travelling related to partners' needs to fill a quota of funded places or 'mobilities'. During the international meetings, participants discussed and evaluated the outcomes of memory learning activities which had been carried out since the last meeting, in parallel, locally in each country with a national group of older learners and, sometimes, teachers. The normal pattern was for the participants from each partner to make a presentation on their local activities to the others at an international meeting. Often the presentations were highly illustrated, practical, involved activities and grew out of the individual natures of each partner organisation. Through these presentations, a bank of original methods and materials on memory methods was built up for possible dissemination and use in the future. Examples can be found in section 4 of this Handbook. Also during the meetings, the national coordinators had a management meeting and plans were developed for further local activities and the ways in which they would be carried out.

At home in the national groups, in the intervals between international meetings, older learners - facilitated by coordinators - worked on the programme of local activities which had been agreed around a theme headlined in the original proposal and/or agreed at the recent international meeting. For each local activity, one partner normally had responsibility for detailed planning and for producing whatever questionnaires, response forms, self-completion check-lists or templates were required for the conduct of the activity [*see source 5 in Section 4*]. Towards the end of an activity, each national coordinator usually reported to the other partners on outcomes, using an agreed template. Questionnaires and checklists were returned by all participants to a single coordinator who would collate the outcomes [*see sources 1 – 4 in section 4*]. The whole enterprise was conducted and communicated in the English language. Thus, a large amount of energy and industry was invested in these local Project activities. Examples of resulting materials are contained in section 4. Detailed accounts of the Project (local) activities can be found in section 2.

The Project conducted two rounds of international internet-based discussion groups for those older learners who wished to join – each one facilitated by one of the participants. The first round focused mainly on memory topics; the second round on a broader range of topics. A project archive was established on the internet to contain whatever research or other material each partner country wanted to place there ([www.memoryxl.blogspot.com](http://www.memoryxl.blogspot.com) ). The Project had a Facebook page which evolved largely to carry photographs originating from international meetings (<https://www.facebook.com/pages/Memory-in-Later-Life-Project/438623576175435?ref=hl>).



## How did it work?

It worked well. To begin the Project activities with an enquiry by the participants into their personal memory strategies had several advantages. It engaged the older learners, immediately showed them that they were not passive with respect to memory and that they had already developed aids to remembering which worked for them. When the outcomes were pooled, it revealed that an amazing range of strategies was in use – from the everyday practical (e.g. putting a shopping bag by the front door) to the mentally sophisticated (e.g. acrostics, associations, mind maps) (*see source 1a in the Appendix*). In national groups there were discussions of new ideas and, no doubt, the adoption of some. Some frameworks were beginning to be formed of the different *kinds* of memory strategy and these were useful in the elaboration of later Project activities. Some national groups looked for international differences in personal memory strategies but none were identified which stood up to scrutiny.

Great interest and satisfaction was created by the activity which asked participants to search cultural sources such as jokes, proverbs and sayings, literature, films, theatre, art , advertisements and other for knowledge (or at least references or instances) relating to memory, especially memory in later life. Much was found (*see source 1b in the Appendix*). Some of it was profound, some partial, some amusing, some stimulating, some misleading, some fascinating, all interesting. The proposition that there was knowledge about memory in later life in cultural sources, sometimes “hidden” or, at least, not overt, was recognised to be generally justified. Older people were exposed to it and did not necessarily realise that this was so. There was discussion in the national groups that more reflection on this cultural knowledge was desirable and would benefit the later stages of the Project. It was also clear that the international aspect of the Project brought material from different countries to the attention of all (*see sources 8 – 13 in Appendix*).

The activity on mnemonic techniques and approaches to memory built on the outcomes of the activity on personal strategies but asked participants to use the internet and other sources to review the techniques and approaches which were available but unfamiliar to them and to try them out. Older learners in the different countries generally did not favour the more complex and sophisticated techniques which might require the learning of a relatively elaborate procedure before it could be applied. Association, rhyme and rhythm, acrostics, chanting and singing techniques attracted a wider range of adherents but memory techniques which involved the full range of human senses had the greatest impact in this activity (*see sources 2, 16, 20 and 32 in the Appendix*). The connections between memory, context, emotions and the senses had not, perhaps, been realised by participants before and to find ways of annexing the power of sensory memory was recognised as a challenge for the Project.



Most of the older learners enjoyed enormously the activities associated with autobiographical and reminiscence approaches to memory. Some began from the stance that memory was one thing and writing autobiographically was another. Writing down memories from thirty years before was not going to help to find the car keys. Some national groups began with an interest in philosophical aspects of autobiographical memory – that what we are, our identity, is shaped by our memory of what we have been and what we have done. The concept of ‘false memory’ intrigued some. However, the practical activities of writing down memories which sprang to mind of childhood, teenage, adult and later life and, then, even more, of telling others about them and perhaps discussing them, captured the close involvement of most of the older learners. It was partly about trying to recall, attempting to be coherent, seeking to understand and presenting a meaningful image to others. But most of all, it was about realising the connection between memory and the emotions. What were remembered most easily were the emotions. If what had to be remembered in the future could be associated with, contextualised by, emotions and feelings, it would be remembered more easily (*see sources 3 and 21 – 24 in the Appendix*).



The Project (local) activity on older people’s attitudes towards memory was concerned with the negative and stereotypical attitudes which many older people have towards their memory; whether attitudes can be changed; and whether attitude-change could lead to improvement in memory performance. In the actual practical activity, each partner was asked to choose two out of ten questionnaires and templates which had been developed around the topic of attitudes to memory (for example, attitudes to myths about older people; own evaluation of own memory compared to that by a friend; comparison of attitudes to memory problems held by younger and older people). Members of the group were asked to complete the relevant questionnaire and to discuss their responses (*see sources 4a and 25 in the Appendix*).



Overall, participants did not consider the questions asked in this activity to be simple or clear-cut. Attitudes held for a lifetime are unlikely to be changed easily; changes in attitude questionnaire scores are not the same, necessarily, as actual attitude change; change in attitudes and beliefs would not automatically lead to adoption of behaviour likely to improve memory. Nevertheless, most participants took the view that rationality was the best way forward. Knowledge about memory in later life, based on sound evidence, was the most likely means to encourage positive attitudes towards memory in older people. So participants suggested discussion of pieces of research on memory and their validity; discussion of problems, fears or beliefs about memory; and attempts to create new positive and motivating myths about memory in later life.

The complex topic of aesthetic experience, learning and memory was added into the Project brief early in the second year. Some Project participants found this to be a difficult topic with which to deal. Essentially it was about aesthetic experience as a means to critical teaching and learning. If attitudes are to be changed among learners, it was argued, it is useful to take them one step back and to consider issues in another context, perhaps that of a work of art which engages, in particular, the visual sense and allows for contrasting interpretations. It can engage feeling and emotion more freely than the written word. But it is also more memorable. Steps of an argument and development in attitude are more easily remembered because they have been exposed to a powerful concoction of emotional and visual memories in the context of critical, interactive learning.

The actual Project activity on which participants worked in their national groups was that of their national anthem (in the guise of a work of art) and memories of when the national anthem had made an impact in their lives. In this exercise, strong memories were revealed combined with evaluations of the significance of events which had shifted over time (*see source 26 in the Appendix*).



The final Project activity undertaken by the national groups was an evaluation and overview of all the memory activities, approaches and techniques which participants had undertaken and experienced in the two years duration of the Project. Older learners and national coordinators reflected on the experience of the Project, on what had proved most valuable and what should be disseminated to a wider audience (*see sources 27 and 28 in the Appendix*).



## The Programme of Meetings and Activities

	Dates	International Meeting	Project(local) Activity
	29 Sept. – October 3 2012	Krakow, Poland	
1(a)	October 2012 – January 2013		Personal Strategies for Supporting Memory
1(b)	October 2012 – January 2013		Cultural 'knowledge' about memory
	23 – 27 February 2013	Frankfurt, Germany	
2	February – May 2013		Mnemonic Methods and Techniques
	30 May – 4 June 2013	Szeged, Hungary	
3	June – September 2013		Autobiographical Methods
	11 - 14 October 2013	Rome, Italy	
4(a)	October 2013 – January 2014		Attitudes towards Memory
4(b)	October 2013 – January 2014		Aesthetic Experience
	16 - 19 February 2014	Athens, Greece	
5	February – May 2014		Outcomes
	6 - 9 June 2014	Lancaster, UK	

## Who were the partners?

Who, then, were the partners and what had they to offer the Project? They were a range of organisations from the six countries of Poland, Germany, Greece, Hungary, Italy and the United Kingdom. As it transpired, they worked rather well together and formed an integrated and complementary partnership. Between them, they combined expertise in educational provision for older people, curriculum innovation and development, research and evaluation, consultation with older people, tutor training, project management and dissemination and publication.

The partners, beginning with the lead partner, were:

### Poland: Stowarzyszenie Akademia Pełni Życia im. Joanny Bochnert

The Fullness-Of-Life Academy Association has been working since 2001 with seniors from the Malopolska region of Poland - both from big cities and small towns. The goal has been to improve the quality of older people's life by creating a wide range of educational opportunities for them. Special emphasis is put on giving seniors access to modern computer technology, language learning and the achievements of contemporary science and culture

The Association organises computer courses, language classes, lectures, seminars, memory training, art workshops, and discussion and hobby groups. It also develops teaching/study



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materials tailored to older people. It carries out innovative educational projects for older people , both locally and internationally.

[www.apz.org.pl](http://www.apz.org.pl)



### **Germany: Frankfurter Verband für Alten- und Behindertenhilfe e.V.**

The Frankfurter Verband für Alten- und Behindertenhilfe is the largest provider of social services for older people in Frankfurt. It operates seven nursing homes, a home care service, nearly 50 residential facilities and 60 locations in Frankfurt with services and activities for older people.

Regular exercise classes, lectures, language courses and visits to the theatre, opera, etc. are offered. There are classes to maintain or expand memory capacity, memory training and autobiography. In four Internet cafés, older people offer PC- and Internet courses for other older people. Practical activities of all kinds (e.g. sewing, knitting, woodwork, pottery etc.) are available in a creative workshop.

The aim is dignified support and care for older people, with self-determination and independence at home as long as possible. Most participants are from lower income groups.

[www.frankfurter-verband.de](http://www.frankfurter-verband.de)



### **Greece: Επιστημονική Ένωση Εκπαίδευσης Ενηλίκων**

The Hellenic Adult Education Association (HAEA) is a scientific non-profit association in Athens with 1000 members, mainly adult trainers. Its mission “the elaboration of scientific thought, action, research for adult education” is achieved through organisation of seminars and national and international conferences; training the trainers; research; consulting; publications and production of printed, audio-visual & electronic teaching material.

HAEA has been very active in the field of third age education. In 2010 it published a study concerned with the training principles, methodologies and approaches suitable for the third age and the stereotypes and myths associated with it. It has also implemented, in cooperation with the Municipalities of Attica, a third age educational programme providing learning opportunities to less advantaged older people.

[www.adulteduc.gr](http://www.adulteduc.gr)





### Hungary: Tan-Folyam Oktatási és Kulturális Egyesület

The Courses Educational and Cultural Association was founded by adult learners. Its main aims are to promote formal, non-formal and informal lifelong learning and to achieve and maintain mental, physical and social well-being through active learning. It organises and conducts various training workshops and projects related to lifelong learning, for example in language and ICT. The majority of members of the Association are older people and the development of teaching and learning techniques and applications appropriate to the age group is a central interest.

The Association works near the southern border of Hungary, in a relatively disadvantaged area, where there is almost no industry; unemployment is high; and most people are on a low income.

[www.tan-folyam.eu](http://www.tan-folyam.eu)



### Italy: Unione Italiana di Educazione Degli Adulti (UNIEDA)

The Italian Federation for Continuing Education is a national umbrella organisation of 65 Italian adult education organisations. It is a national focal point for the development of an inter-generational pedagogy aimed at different generations and cultures in the name of their common educational needs. As a research and experimentation centre for adult education activities and methodologies, UNIEDA is particularly active in the promotion and dissemination of autobiographical and biographical narrative methodologies and explores their relationship with the memory and learning of older people. It participates in the implementation and dissemination of European Grundtvig projects at national and transnational level and, in 2010, developed for use a model bill on Lifelong Learning, which was regarded as strategic for the achievement of Lisbon objectives and aims.

[www.unieda.it](http://www.unieda.it)



### United Kingdom: Association for Education and Ageing

The AEA (Association for Education and Ageing) is an international membership organisation. Its particular strength is combining the interests of research, practice and policy in relation to learning in later life. It involves older learners in dialogue with professionals and volunteers. It promotes a) older people's education and learning activities; b) the education and training of professionals and volunteers who work with older people; c) public education about the ageing process.

AEA runs conferences, workshops and seminars; publishes the *International Journal of Education and Ageing*; responds to UK and EU public policy initiatives and participates in EU-funded projects (e.g., currently, a GRUNDTVIG multilateral networks project and, including this one, two Grundtvig Learning Partnerships).

[www.associationforeducationandageing.org](http://www.associationforeducationandageing.org)



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## Chapter 2 Project (Local) Activities

### How Project (local) activities were conducted

In the Memory in Later Life Project the core work of local activities was carried out in national groups in the intervals between international meetings. Topics had been agreed and were refined at the international meeting immediately before an activity. The work was carried out in parallel by groups of older learners, normally including some individuals who were teachers of older people themselves. For each local activity, one partner was normally responsible for coordinating and reporting on the activity, for producing questionnaires etc. and analysing the responses to them.

The following table summarises the Project local activities which took place:

	Dates	Project (local) Activity
1(a)	October 2012 – January 2013	Personal Strategies for Supporting Memory
1(b)	October 2012 – January 2013	Cultural ‘knowledge’ about memory
2	February – May 2013	Mnemonic Methods and Techniques
3	June – September 2013	Autobiographical Methods
4(a)	October 2013 – January 2014	Attitudes towards Memory
4(b)	October 2013 – January 2014	Aesthetic Experience
5	March - May 2014	Outcomes

However, it could not be expected that all national groups would behave in the same way. Towards the end of the Project all partners were surveyed on how the national groups were constituted and how they functioned. The information received provides the context and the source of the local activity outcomes.

All of the partners had recruited a group of older learners to work on the Project. One partner recruited a group of older learners who had relevant professional expertise. Almost all of them were “*engaged in adult learning and education as teachers/ researchers/ consultants*”. Two of the partners recruited from older people already active in their organisations; two recruited generally from outside their organisations; and two added the Project’s activities on to the content of one or more existing English language class. For the latter, the Project was, at least partially, practical English language experience. “*We regularly have English classes with twelve members*”, wrote one of these partners “*they all agreed ...we would dedicate some meetings to the project topics*”.



Meetings of the groups in the different countries varied but the most common pattern was to meet monthly or fortnightly with a long break in the summer. In some cases, meetings were held more frequently before and after international meetings. Meetings mostly lasted about 1.5 hours. One language class met weekly for language purposes in term-time and might devote 20 minutes each week to Project activities. Partners wrote that participants, once having joined, were expected to attend regularly and usually did. The content of meetings was varied. One partner described the group’s experience: *“during each meeting we had some power-point presentations, discussions, brainstorming, we worked individually, in pairs and small groups”*

Membership of the groups was mainly between 15 and 20 older people in most cases, with some movement in and out of a group during the two years. One of the partners involved over 30 older people through three English language classes. Therefore, about 120 older people participated in the Project’s activities. 75% were female. Almost all had experienced higher or university education. The majority was over 50 years at the start of the project. The oldest was over 90; only a few were as young as 40 years.

Coordinators normally planned and facilitated the group meetings in each country but all partners reported the lively involvement by older learners in all aspects of meetings:

*“The whole group was active and everybody tried to add something to each topic that we discussed”.*

*“The discussions were very vital, constructive and filled with personal experiences”.*

*“Everybody could contribute with documented new knowledge, examples, etc.”*

*“The local meetings were always very satisfying and challenging. They were never boring or repetitive and every learner took actively part in the debate.”*

*“Our senior group was very active and eager to discuss the topic”*

All partners reported in their responses to the survey that the local meetings followed as closely as possible the agenda agreed and laid down internationally. Some commented, however, that the detail of what they should do was not always completely clear after international meetings and matters had to be clarified through subsequent email correspondence.

Most partners, some more emphatically than others, said that their older learners also wanted to find out about and discuss more than the topics agreed internationally. Some interpreted the question asked as referring to study of new topics; others took it as referring to additional work on a current Project topic. They found that the international meetings were a real stimulus to national discussions. Comments included:

*“Sometimes they wanted to know more about the given topic... After international meetings they got really motivated and gained lots of inspiration for further work.”*



*“Yes, very often they want to discuss more and find out topics in addition to the main theme.”*

*“Yes. Each year the group produced a list of memory topics on which they wished to spend time which were in addition to those on the international menu...Our group quickly became a sort of continuous seminar on memory”.*

Among “new” topics mentioned were: memories connected with music; auto/biography of famous people; the impact of food and activity on memory; how the media reported research on memory and how those reports related to the original research papers.

The partners were asked whether the fact that other international partners were working simultaneously on the same Project activities was important to them and their older learners. All of them replied “yes”. One wrote *“The simultaneous work of other partners was essential for the learners’ motivation”*. All partners said that the international meetings were discussed in national groups. *“It was important because we can compare answers”*. In at least three countries, those who attended international meetings came back and gave formal presentations on them. *“Yes, this way of dealing with topics was quite inspiring and successful...The work of the partner groups was always discussed ...This way of sharing experiences contributed largely to [its] success and popularity”*. Some partners mentioned disseminating in the national group material (e.g. power-point presentations) shown in international meetings: *“It is motivating to know that other national groups work simultaneously on the same topics. People feel eager to work for a common end”*.

At the end of the survey, partners were asked if there was anything else they wanted to say about the Project (local) activities. Two mentioned the interest of the autobiographical memory work in the project. However, the most common response was regret that the Project was ending.

*“Not one member of our group is happy with the idea that this specific project has come to the end and we will probably not have the opportunity to meet again.”*

*“Our members like the project so much that they have asked us to find some way to continue”*

*“Our seniors regret that we are finishing our project and asked us to think about its continuation.”*



## Project Activity 1a: Personal Strategies for Supporting Memory

### What was the topic?

This was the first half of the first Project activity carried out in the partner countries. It was concerned with investigating the individual and personal strategies and methods which older learners and their teachers used to improve and preserve their memories, even to compensate for the deficiencies which they perceived in them. It is, of course, true that since the neurons in our brain that are responsible for memory lose some elasticity over time older people may tend to forget things more easily. A small decline in our powers of general cognition is also natural as we age. But there is plenty which older people can do in response to these factors as this Project activity was to prove. The questionnaires which Project participants filled in showed that many of them follow the general and scientific advice to live a healthy life-style and to engage in physical activities and exercise. They also followed advice to reduce stress, sleep well, have diverse interests and constantly learn and engage in trying new things.

However, forgetfulness is a common complaint among older people. Most Project participants reported that they frequently have problems with remembering. They misplace keys and glasses and forget telephone numbers, names of people, addresses and appointments. Some say that have trouble recalling the details of a conversation, or what they have just read or heard. Walking into a room and forgetting why they entered was also mentioned in the questionnaires. But occasional problems of this kind are a normal part of life – even for younger people - and not a warning sign of serious cognitive decline or mental deterioration or the onset of dementia. There are many external factors that can prevent one's memory from performing properly in certain situations and cause occasional memory lapses: stress, tiredness, lack of concentration, and so on.

### How did we work?

It was one of the aims of the Project to collect together the individual methods and strategies that can help make one's brain livelier and boost memory storage and recall. Project participants in the six countries provided a great deal of information. They were asked to complete a questionnaire which would identify their personal methods for dealing with actual or perceived forgetfulness. They had to describe the method briefly, together with some examples, underline its benefits and define for whom they would recommend it. On the basis of the questionnaires, during the second international meeting in Frankfurt, the representatives of each country gave presentations on the findings of the local groups. Source 1(a) in the Appendix contains examples of this material.



The topic proved to be extremely important for everyone and it was concluded that a vast majority of memory problems and concerns are international regardless of age, gender or culture.

Project participants said that found this activity very enjoyable and useful. Not only did they share their own personal methods with other older people but learned many new methods from each other as well. There was considerable discussion of how personal methods might be refined or improved and how they could be incorporated into formal learning and teaching sessions.

## Results and Examples

- POST-IT
- LISTS
- CALENDAR
- A BLACKBOARD
- MOBILE



What follows are some of the personal methods for combating forgetfulness communicated by Project participants:

1. **Write notes or checklists** to keep track of dates, schedules, tasks, phone numbers, shopping lists, etc. You can write these lists on slips of paper or post-its, in notebooks or desk calendars, etc. Put/stick the checklists and notes on the fridge door, in your bag or glass-case, on the kitchen table - a place where you will surely find them.

If you like modern technology, you can also use the applications on your mobile, computer, iPad, etc. Nowadays, such computer programmes and websites are available that include calendars that will remind you when the time comes and to-do lists.

### 2. **Have a system**

Leave the things you use regularly (e.g. keys, glasses, watch, mobile phone) in the same place when you are not using them. Put items where they are visible and where you will see them until you do whatever needs to be done with them. For example, place things to go upstairs at the bottom of the stairs, or put the bills on the same place until they are processed. If you need to take certain sets of items with you when you go somewhere (e. g. to play tennis or squash), leave them in a bag near the front door when not in use. Or you



can make use of the doorknob itself by hanging things on it and then you will not forget to take something important with you when you leave.

If you establish specific e-mail and desktop folders for important documents, you will know immediately where to go first.

### **3. Associations and linking**

Try to think of a link for connecting new and old knowledge and relate new information to things you already know. When you are studying unfamiliar material, for example, new foreign words, take the time to think about how this information relates to words and phrases that you already know. You can try to connect new information to something familiar like a song, a place, etc. Or, when you want to memorise a route, pay attention to recognisable spots or signs, for example, the house where you have to turn right, etc. For remembering people’s names, try to associate the name and face with something characteristic (beard, moustache, hair-do, style, some distinctive features, etc).

*(See also Chapter 3.2)*

### **4. Repetition**

Talk to yourself and repeat the tasks to be done or the information you want to remember. To remember people’s names, for example, it may help to try to use their name several times in the first conversation you have with them.

### **5. Go back to the starting point**

It may help to go back to ‘square one’ if you do not remember why you entered a certain room (the front door or the kitchen at home, etc.)

### **6. Trust your senses**

If you can see it, touch it, taste it, hear it and smell it, you are much more likely to remember it. For example, focus on retrieving visual details, such as colours and shapes, and take a mental picture (a “visualisation”) of the information that you want to recall. Employ your sense of hearing if there is a distinctive sound that will help you recall the event and your sense of smell if there is a scent or odour. The more senses you involve when you need to encode memory, usually the stronger a memory it becomes.

*(See also Chapter 3.3 and source 32 in the Appendix)*



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## 7. Writing down steps

This method is especially good if you want to remember a process or use a new gadget, for example, how to set a certain function on your new mobile phone.

## 8. Acronyms and Adding Meaning

If you want to memorise lists, you can invent acronyms using the starting letters of the items, or make associations (for example, ROYGBIV - Red, Orange, Yellow, Green, Blue, Indigo, Violet – the colours of the spectrum or, more familiarly, the rainbow).

You can also remember something more easily by adding meaning to it. So, you can create a story that relates to the list of words you want to memorise. If you’re trying to remember items on a shopping list, you can make a sentence out of them.

(See also Chapter 3.4 sources 16 in the Appendix)

## 9. Focusing

When you take time and focus hard on something, you probably will remember it. You can remember facts if you need and want to remember them and you give them your full attention. When you are motivated, you can concentrate harder. Increased concentration makes the information easier to remember. Your purpose helps you to decide which information to remember because purpose directs your attention to what you want to know.



## Conclusions from our work

Everybody has their own personal methods to cope with everyday memory problems. We cannot generalise about which work best because the efficiency of a method depends on many factors. Learn what works for you and experiment with different strategies! It is also important to develop a constructive attitude towards your own memory. Try to be positive and optimistic and then you can overcome lots of memory-related problems – if you think that you have them. Laughter is the best medicine and that holds true for the brain as well as the body. No matter how old you are, there are many ways you can improve your cognitive skills, prevent memory loss and protect your grey matter.

## Project Activity 1b: Cultural ‘Knowledge’ about Memory

### What was the topic?

One of the foundations of the Project, undertaken as the second part of Project activity 1, was an investigation of “knowledge” about memory which surrounded participants in the cultural forms around them. It could be said that that participants did not need to read academic and research papers to find out about memory but to look into cultural forms such as proverbs, jokes, literature, films, drama, art, architecture, advertising and so on to find it. There it was, more or less, “hidden” but accessible. Memory, and human attitudes to it, was a topic of profound and ever-present interest. It was inevitable that it would be part of folk wisdom in the form of sayings and jokes and that poets, dramatists and novelists would write about it, painters seek to represent it, film-makers make films about it and advertisers make money from it.

This activity required participants in the project to search and discuss cultural forms. It built on the content of project activity 1a, personal strategies, from different directions. It showed the breadth of thinking about memory in the cultures of the 6 participant countries. Since artists of all kinds concern themselves with portraying and understanding the human condition, and give frequent attention to memory, it confirmed the significance of memory to human identity and the ways in which it can be nurtured and safeguarded. Cultural forms rarely convey “knowledge” about memory in a didactic manner. They are free of the restrictions of valid evidence which bind academic work. Therefore, they work with myths, mistakes and falsehoods as well as truth, clarity and accuracy. But through allusions, metaphors, impressions and dreams they can challenge and stimulate human understandings and feelings. They did it in this Project activity.



## How did we work?

Older learners in each partner country were guided by a template to collect together examples of knowledge about memory in as many of the cultural forms as possible. These were pooled in the national group and their implications discussed. They were also sent internationally to one coordinator for collation and summarising. This coordinator wrote in her report:

*We have collected a total of 37 proverbs, 34 jokes, 32 works of literature, 89 phrases of wisdom, 43 films, 7 theatrical plays, 10 works of art and 14 advertisements.*

At the Frankfurt international meeting, the summary was presented and discussed and each national group made an illustrated presentation on its own findings and discussions (*See sources 8 – 13 in the Appendix*).

## Results and Examples

### 1. Proverbs, Sayings and Quotations

There was a rich harvest of proverbs, sayings and quotations from older learners in all six partner countries. Some contained memory rules at their most succinct. For example, there was Benjamin Franklin’s aphorism *Tell me and I forget, teach me and I may remember, involve me and I learn*, Samuel Johnson’s dictum *The true art of memory is the art of attention* and the old Latin tag *Memoria in senectute minuitur nisi exercetur aut (if you don’t give your memory practice it is diminished in old age)*. On the virtues of writing things down there was *a good memory is not so good as a little ink*.

Seneca identified a paradoxical connection between memory and feelings: *things that were hard to bear are sweet to remember*. Alessandro Morandotti noted that *there’s a difference between forgetting and not remembering*. Cesare Pavese observed that *we do not remember days, we remember moments* and he continued *the richness of life lies in memories we have forgotten*. By contrast, Thoreau dismissed forgetfulness with *of what significance are the things you can forget?* Tadeusz Kotarbiński said that *the past kept in our memory becomes the present*. Stanisław J. Lec reflected dourly that we cannot rely on human memory. Nor on human oblivion, unfortunately.

Cicero magisterially proclaimed that memory is the treasury and guardian of all things. Solzhenitsyn, on the other hand, thought that memory made it possible to travel lightly - own only what you can carry with you; know languages, know countries, know people. Let your memory be your travel bag .



## 2. Jokes

Some jokes about memory in later life are evidently international. A number of the same or similar jokes were sent in by older learners from a majority of the partner countries. Jokes are interesting phenomena because they are cultural forms which often align prejudice and stereotypes with humour. Jokes about memory in later life often make fun of short-term and long-term memory problems and generally support stereotypes of forgetful older people. An example (combining gender and age stereotyping) is:

*Three old ladies are chatting about various things. One lady says "You know, I'm getting really forgetful. This morning, I was standing at the top of the stairs, and I couldn't remember whether I had just come up or was about to go down". The second lady says "You think that's bad? The other day I was sitting on the edge of my bed and I couldn't remember whether I was going to sleep or had just woken up!" The third lady smiles "Well, my memory is just as good as it's always been. Knock on wood" she says as she raps the table. Then with a startled look on her face, she asks, "Who's there?"*

Sometimes such jokes also include methods for improving memory - for example, the "association" method:

*A very old man read in the newspaper of a very good doctor. He was known for pioneering results in healing memory-problems. After reading it, the man told his wife that he would go to that specialist. His wife agreed and decided to go with him.*

*After the treatment a good old friend of the couple visited them and asked about the results of the therapy.*

*The old man said to his friend: " You have to help me. What's the name of the flower with long flower stem and thorns?"*

*"Rose" said his friend.*

*"Oh yes, Rose!"*

*Then he turned to his wife and asked: "Rose, can you remember the name of the doctor?"*

The above joke came in different forms from almost every partner country. Another memory support which becomes the object of a joke is that of the practice of writing things down:

*An 80-year-old couple is having trouble remembering things, so they go to see their doctor to make sure there's nothing wrong.*

*After an examination, the doctor says, "You're physically okay, but you guys might want to start writing notes to help you remember things."*



*That night they're watching TV when the old man gets up from his chair.  
His wife says, "Where are you going?"  
He says, "To the kitchen."  
She says, "Will you get me some vanilla ice cream?"  
He says, "All right."  
She says, "Don't you think you should write it down?"  
He says, "I don't have to write it down...vanilla ice cream."  
She says, "Could I have strawberries and whipped cream?"  
He says, "All right."  
She says, "Don't you think you should write it down?"  
He says, "I don't have to write it down...vanilla ice cream with strawberries and whipped cream."  
Twenty minutes later he walks in and hands her a plate of bacon and eggs.  
She says, "You forgot my toast."*

Even a sort of successful remembering by an older person can be made humorous. The following joke encompasses a pleasing paradox:

*An elderly woman enters the pharmacist's.  
"A packet of Acidum Acetylosalycilicum, please."  
"Acidum Acetylosalycilicum?" said the pharmacist. "Why don't you ask simply for Kalmopyrin?"  
"Yes, that's it. I didn't remember its name".*

### **3. Literature: Novels**

Project participants had no difficulty in finding references to memory in many novels and other forms of literature. The book most often quoted from different countries was the novel in seven volumes *À la recherche du temps perdu* (translated variously into English as *Remembrance of Things Past* or *In Search of Lost Time*) written 1871 – 1922 by the French author Marcel Proust. A key theme is involuntary memory. The most famous example – emphasising the powerful contribution of the sense of taste to memory - is the “Madeleine effect”:

*No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through me .... An exquisite pleasure had invaded my senses, something isolated, detached, with no suggestion of its origin. And at once the vicissitudes of life had become indifferent to me, its disasters innocuous, its brevity illusory – this new sensation having had on me the effect which love has of filling me with a precious essence; mean? And suddenly*

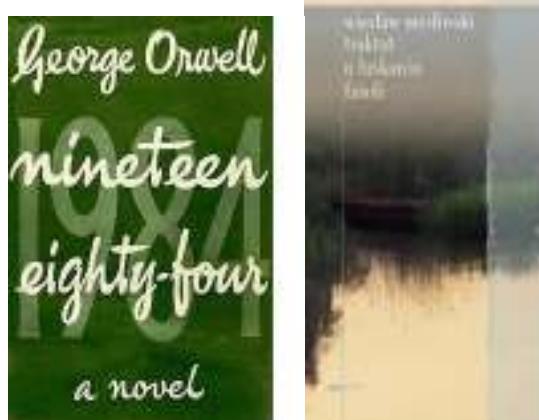


*the memory revealed itself. The taste was that of the little piece of madeleine which on Sunday mornings at Combray ..., when I went to say good morning to her in her bedroom, my aunt Léonie used to give me, dipping it first in her own cup of tea or tisane.*

There is also the haunting passage depicting the reconstruction of self from the flickerings of memory:

*I awoke at midnight, not knowing where I was, I could not be sure at first who I was; ... but then the memory, not yet of the place in which I was, but of various other places where I had lived, and might now very possibly be, would come like a rope let down from heaven to draw me up out of the abyss of not-being, ...: in a flash I would traverse and surmount centuries of civilisation, and out of a half-visualised succession of oil-lamps, followed by shirts with turned-down collars, would put together by degrees the component parts of my ego.*

The very different novel “1984” by the British writer George Orwell, published in 1949 was described by older learners from several countries. It portrays a chilling picture of a fascist dehumanising state in which truth and history are what the ruling party decree them to be. For the party, memory is the enemy and must be destroyed so that individuals – emptied of identity - can be manipulated and controlled. Their identities are given to them by the party. Memories get in the way of the process so they must be cleansed. Memories of unpersons go into the ‘memory-hole’.



*Traktat o łuskaniu fasoli* (*The treatise on shelling beans*), published in 2006, is by the Polish author Wiesław Myśliwski. It is a monologue on human life addressed by the narrator to a mysterious visitor, who joins him to shell beans. Human life is nothing without memory: *We as people depend on our memory like a forest depends on the tree and a river depends on its riverbanks... We are created by our memory.* But memory lacks structure. Myśliwski expresses it beautifully:

*I carry within me an endless number of faces as if conceived in these brief flashes. I can't recall whose or where or when. I know nothing about them. Yet they live in me. Their*

*moments of thoughtfulness, their gazes, sadness, paleness, grimaces, and bitterness all live in me, retained as if they were on photographs.*

Yet there has to be a structure, a story. The story of a life has to be told - *what is told, is the only possible eternity. We live in what is told.* So, it is our imagination that helps to give structure to memory, imagination that is fuelled by our desires, our emotions, our longings: *The remembrance of the past is only our imagination, and the imagination needs longing. It simply feeds on longing. The past has nothing to do with time.*

#### 4. Literature: Poems

At the Frankfurt international meeting the Italian group showed, as part of their power-point presentation a short video of images illustrating a poignant poem *Forgetfulness* (1990) by the American, Billy Collins (see source XX). The poem is about the nature and sadness of forgetting as one ages. Collins writes that it seems that every time we learn something new, we forget something that we used to know:

*and even now as you memorise the order of the planets  
something else is slipping away, a state flower perhaps,  
the address of an uncle, the capital of Paraguay...*

Project participants nominated only a few poems but they all the impact of emotion startled into existence by metaphor. Two British poets were mentioned. Wordsworth (*The Prelude*, 1888) was noted as capturing aptly the image of minor yet therapeutic memories as "spots of time" kept alive by associated feelings:

*There are in our existence spots of time  
Which with distinct pre-eminence retain  
A vivifying Virtue... [by which]... our minds  
Are nourished and invisibly repair'd*

T.S Eliot, in *Four Quartets* (1943) wrote of memories of the paths which we did not take:

*Footfalls echo in the memory  
Down the passage which we did not take  
Towards the door we never opened  
Into the rose garden.*



But why trouble to do this?

*But to what purpose*

*Disturbing the dust on a bowl of rose-leaves*

*I do not know.*

After all:

*We shall not cease from exploration*

*And the end of all our exploring*

*Will be to arrive where we started*

## 5. Films

At Frankfurt the Polish group showed a video clip from the film *The Forgotten Melody* (1938) in which one of the characters learns by heart a prescription for a soap. A melody helps him to remember and to recall this prescription (See source 13 in the Appendix). The UK group at Frankfurt sang the Maurice Chevalier/ Hermione Gingold duet from *Gigi* (1958) entitled *Ah yes! I remember it well*. An elderly man and woman, former lovers, meet again after an interval of many decades. The man, Honore, cannot recall the details of their last meeting, the woman, Mamita, remembers them (and Honore as “a prince of love” when a young man) only too well:

*H. We met at nine*

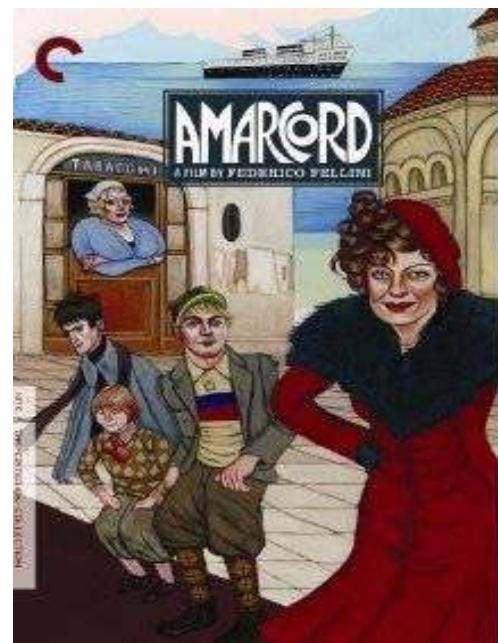
*M. We met at eight*

*H. I was on time*

*M. No you were late*

*H. Ah, yes, I remember it well*

A number of Italian films (notably *Amarcord*, 1974 and *Nuovo Cinema Paradiso*, 1988) were proposed for their atmospheric treatment of memory in which recollection is filtered through imagination and the present is intermingled in a bitter – sweet emotional interaction with the past. In the American science fiction and psychological drama *Eternal Sunshine of the Spotless Mind* (2004) the question is raised of whether a failing love relationship



could be resurrected if only the couple could escape in the present from their memories of past mistakes and conflicts.

## 6. Art and Architecture

It is impossible to walk down any street in the centre of a European city without being aware that the buildings are a visual storehouse of memories of past times, past fashions, past economies and past ways of life. When they were constructed, passers-by were meant to understand and remember the messages which the buildings transmitted. Building use, symbols and decorative styles may all have changed but the original memories should still be readable.

The Polish group of older learners took an interest in mediaeval architecture. The main role of the fine arts, then, was not decorative but moral and didactic. It was to teach and to warn in times when most people could not read. The architecture, structure, sculpture, paintings and ornaments of important buildings, mostly churches, could be shown to have incorporated mnemonic methods to remind the faithful of the dogma and morality which bound them (*see source 1b in the Appendix*).

The UK group of older learners took an interest in late Victorian painting and the fascination of some late 19<sup>th</sup> century artists with what happens when the memory of the spectator is engaged. A shift from realism led to an interest by painters in memory as a process and to experimentation in the representation of memory in painting. The UK group looked at John Everett Millais' *Dew-Drenched Furze* (1889 - 1890) as an example of the way painters sought to invoke a memory response in the spectator through, for example, use of light and colour, tactility and quality of paint.



Older learners from most of the partner countries considered modern art. The picture most often cited was *The Persistence of Memory* (1931) by Salvador Dali. This painting contains four watches in a barren scene, three of which appear to be melting, as if made out of soft cheese. The only watch which is not malformed is infested by ants. The dream-like images probably have no fixed ‘meaning’ but may be signifying the decay of the notion of linear time which underpins memory as we know it (*see source 12 in the Appendix*).

## **7. Advertisements**

All advertisements are based on mnemonic rules. Their goal, after all, is commercial. They have to attract our attention and to lodge themselves in our memories. After their discussion of advertisements, the Polish group wrote:

*Advertisements work better if they are...surprising, colourful, moving, funny, concerned with well known and liked people, relate to something that matters to us, relate to sex, remind us of something nice, appeal to our senses, use rhythm and music, play with words, put together unexpected elements, are short and easy to articulate, are repeated many times.*

(*see source 1b in the Appendix*)

The Italian presentation at Frankfurt included an amusing clip from an advertisement on the theme of “an elephant never forgets” designed to sell chocolate (*see source 10 in the Appendix*).

## **Conclusions from our work**

The variety and richness of the materials collected together for this Project activity justified the two claims made earlier, that i) knowledge about memory could be found abundantly in the wide range of cultural forms investigated by the older learners; ii) the ‘knowledge’ was not presented didactically but often metaphorically, ironically and symbolically; with hints and whispers, with allusions and gestures; with questions and puzzles. So it solved nothing and opened up everything. That is another way of saying that it gave the older learners in the Project a lot to talk about and, with the outcomes of the personal strategies activity, gave them incentive and enthusiasm to go forward with questions to the future activities of the Project.



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## Project Activity 2: Mnemonic Methods and Techniques

### What was the topic?

The topic for the second Project (local) activity was concerned with identifying mnemonic methods, techniques and rules which would be most useful for older people in daily life and helpful in their learning in general and in particular subject areas . Groups in the partner countries researched, practised, learned and familiarised themselves with a number of mnemonic methods, techniques and rules, some supported by scientific literature and research on brain function, in order to decide which of them might be the most useful in helping their members with their memories.

Mnemonic methods, techniques and rules have been developed to make it easier for people to store and recall information. There are many memory training courses made available to older people by a wide range of companies, organisations and providers. Many of these training courses utilise mnemonic techniques. But, are they all helpful for older people? Are they easy to apply and to use? Are they practical in everyday life? Can they be used in the classroom? Do they grow out of the experience of older learners and their teachers?

We were aware that we had to be careful. Some mnemonic techniques and rules are difficult to understand, apply and use in the first place. We did not want to demoralise our older learners by confronting them with learning tasks which seemed not only troublesome but also not worth the trouble. The chief hypothesis which the groups, after all, were testing was whether there were useful techniques to learn which were easy to try out in the classroom and in everyday life, and which would make their learning easier and them more motivated. Then, hopefully, they would become more self- confident about their memories and ready to encourage their peers in the same direction.

### How did we work?

In the first stage, participants of the local groups were asked to find 3-5 mnemonic methods/techniques/rules/exercises which they wanted to try out. These could be found on the Internet, in appropriate literature, through conversations with teachers or peers, in class meetings or elsewhere.

In the second stage, having tried them out, the participants should evaluate these methods to determine whether they worked for them and whether they might be useful in education in general and/or in relation to particular subject areas. Their personal experience was important so



we wanted to know what that was, whether they had difficulties and what kind of success they had with their chosen methods.

Normally each national group came together and discussed the experience and views of the group members. Eventually they came to a group consensus on which mnemonic methods, techniques and rules seemed to be most successful in their experience and worth the Project pursuing further. Their views were communicated to a nominated coordinator who collected together the data from the six partner countries and gave a summary presentation at the next international meeting in Szeged. Groups from each partner country also gave a presentation.

The outcomes of this work are presented below.



## Results and Examples

Mnemonic methods, techniques, rules and exercises identified in this Project activity as the most notable are summarised briefly in what follows. Further detail will be found in other parts of the Handbook (*see source 2 in the Appendix for responses and information from each country*).

### 1. **Word mnemonics:**

“Here we are talking about using (in acronyms, extended acronyms or acrostics) the initial letter of words or names, which are to be remembered, to make up other words, sentences, sayings or aphorisms” - as one of the participants put it in a response. We have added Rhyme mnemonics to this category.

#### **Acronyms**

An acronym is a word memorised because it is built up of the initial letters of all the keywords or ideas one wants to remember.

Example:

HOMES is the acronym for the Great Lakes in North-America: Huron, Ontario, Michigan, Erie, Superior.

#### **Acrostics**

The initial letter of each word in a sentence or poem is used to help memorise special items.

Example:

“Can Queen Victoria Eat Cold Apple Pie?” stands for the seven hills of Rome: Capitoline, Quirinal, Viminal, Esquiline, Caelian, Aventine, Palatine.

It can also be used for remembering correct spelling.

Example:

BECAUSE - Big Elephants Can Always Understand Small Elephants

**Rhyme mnemonics** Some of us have learned such rhymes in our childhood or in school to learn and remember special information. But we can create also rhymes by ourselves to remember the things we want to remember.

Example:

In England, the following rhyme is commonly used to remember the number of the days of each month:

30 days hath September  
April, June and November.  
All the rest have 31,  
Excepting February alone,  
Which only has but 28 days clear  
And 29 in each leap year.



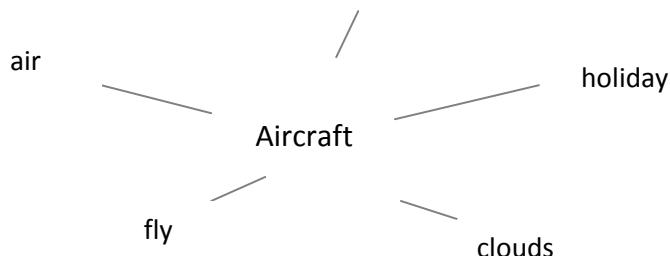
These word mnemonics are useful for remembering lists of words, names, formulae and processes. It is helpful for learning data in subjects such as in geography, religion, history or languages.

## 2. Association and Visualisation

Association means that words, subjects or objects are connected with other words, subjects, objects... The association-links are so closely connected to each other that by recalling one link the other links will be remembered as well. These associations work particularly well if the association relates to personal objects or matters. Here are some examples which are based on associations:

the Association star for learning languages

The general method is to find a lot of associations to one object and link them with the object like a star.



Picture and word associations:

The use of words associated with pictures, verbs with nouns, noun with appropriate verbs and especially verbs with situations. It can be amusing to do this in a group.

(*For more on “Association” see Chapter 3.2*)

If the association is an image, we are talking about visualisation. An image can be stronger than a word - commercial advertisers are quite clear about this.

It is easier to memorise something when we have a picture in mind. The more detailed or colourful it is, the easier we can remember the information we connected with the image.

(*For more on “Visualisation” see Chapter 3.4*)

## 3. Interactive learning

Interactive learning takes place in communication with others – in dialogue, in groups or even virtually. The whole person is involved in an interactive process of memorising and learning. While communicating with others you have access to more ideas, more data and more points of view on the topics under consideration. It seems to be especially effective when taking place inter-



generationally or on an international basis (as members of the Project repeatedly demonstrated to each other). The particular point is that in interactive learning the whole person can be involved and thus memories are reinforced. Sharing memories or feelings with others not only makes one more open minded, and assists memory, it can lead to a new or deeper appreciation. Interactive learning can be empathetic and joyful and thus associates memory with the emotions.

(For more on Interactive Learning see Chapter 3.5)

#### 4. The Mind Map

The Mind Map is a kind of (tree) diagram with the main word, idea or the theme in its centre. From there, branches for the major categories will grow. From the major category branches sub category branches will grow naturally.



(For other illustrations of mind maps see sources 7 and 8 in the Appendix)

This method can be used in different ways.

On the one hand, one can use the Mind Map for arranging a confusing or very big theme and bring it into a clearer arrangement. By creating a structure, a mind map facilitates the recall of even a large amount of information.



On the other hand, the Mind Map offers the possibility of letting brain activity flow freely in thinking, memorizing and associating creatively. Thus, it stimulates new mental link-ups which will probably remain in the forefront of memory.

The Mind Map allows the learner to link new information with previous knowledge and, perhaps, to learn in a less stressful way, with imagination, recall, logic and humour co-existing.

### 5. The Senses and Memory

Project participants found, and agreed, that the five senses are very important for successful memorising. The more senses that are associated with the learning process, the more effectively information is stored and recalled later. The more senses that are involved, the more impulses will reach the brain and the more connections can be created between the nerve cells.

Most of us know how strong memory encoding by the senses can be. For example, while thinking of a rose, many people can also imagine the smell. Or we smell the sea on an object and immediately we remember images of the sea and special situations where we experienced that smell before.

Learners can use their senses for memory in many different ways – for example, talking aloud (the sound of the voice in the room) about something which they want to remember, listening to relaxing music, building mental pictures or scenes, touching an object which they want to fix in the memory. Some people remember better when they walk around or are in motion (on a train perhaps or even a bicycle).

*[For more on the senses and memory see Chapter 3.3)*

### Conclusions from our work

We realised at the end of Project Activity 2 what a large range and variety of topics we had by now touched upon in the Project. It was impossible to say that any mnemonic method, technique or rule was the best or the most effective. Different participants had different views and it seemed very probable that these methods worked differently for different people. Moreover, there was no particular need to put them into a rank order. They could co-exist; older learners could use any or all of them. Most probably, these methods helped memory best when they interacted and reinforced each other. So we returned to the content of this Project Activity intermittently during the remainder of the Project as it occurred, internationally and in national groups, in other Project activities and discussions. This is mirrored in the fact that there are considerable cross-references between the content of this chapter and other sections of the Handbook.



## Project Activity 3: Autobiographical Methods

### What was the topic?



Participants in the Project found that the third Project (local) activity, which was concerned with autobiographical methods, revealed a very effective and powerful tool for developing and improving memory. This project activity occupied the summer months of 2013, beginning after the Szeged international meeting and ending with the international meeting in Rome.

It is argued that autobiographical memory is an important element of our identity, although we do not always remember what is important in our lives. Indeed, we are not always able (or we do not have the experience) to bring together the different aspects of our history and of our personality, the complete “Self”. We are not always able to collate, to combine and to enhance the many experiences that we have lived, all that we had the opportunity to learn, not only about ourselves but also of the world.

Autobiographical method is, therefore, not only a way of exercising a particular form of memory but is a way to "remember ourselves", and to "remember the world".



## How we worked and examples

a) In the first place all members of the Project from the different partner countries were asked to fill in a questionnaire about their attitudes towards autobiographical practices. Normally the questionnaire was completed in English. The coordinators in the partner countries collected the questionnaires from their groups, discussed them and, with permission, sent them to coordinators in the other countries.

Examples of questions are:

*Do you ever write about yourself and your memories? How often?*

*In which form? (autobiography, diary, letter etc.)*

*At what age did you start?*

*Do you usually keep reminders and/or mementos of personal events in your life or of public or historical events? (photos, dvds, souvenirs, objects, newspapers etc.)?*

*Which events do you want to remember?*

b) Subsequently participants were asked to write an autobiographical list of memories from the four stages of their life. They did not have to write more than a few words about each item but some did:

CHILDHOOD

TEENAGE

ADULTHOOD

LATER LIFE

c) For each period, participants were asked to identify (up to) the first ten personal memories that came to their mind. The responses were shared throughout the Project as in the previous exercise:

This is an example of one participant's autobiographical list:

### TEENAGE

- 1) *The sorrow when I saw my cousins leave, after many years spent playing together – alone again*



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- 2) *The unforgettable summers in Civitanova*
- 3) *The first time I drove a car at 10 years old: what an emotion!*
- 4) *At 12, the meeting with my future mother-in-law after a day on the snow*
- 5) *When I skipped school to go walking in Villa Borghese with my school mates*
- 6) *The excitement when at night I took my uncle's car without him knowing*
- 7) *The meeting with my husband at my uncle's home*
- 8) *My first bikini with white dots that I used to hide when I came back home from the beach*

d) Then the project members were asked to write a personal story for each of the four stages of life. Many did so, at some length.

e) During the meeting in Rome, in the first session, each participant who attended was asked to think about what they had written in the earlier exercise, in order to identify which memory could be related to the following categories:

- Things we've learned*
- Experiences that made us know the wonder of life and the wonder of the world*
- Values, the awareness of what is important in life*
- The World, discovering "how the world works"*
- Discovering myself.*

Participants were asked to select and cut the fragments of texts related to these categories, and stick them onto a poster.

f) In the second Rome session, participants were divided into four storytelling circles. Each circle was concerned with stories about a particular topic or stimulus. Participants had to tell in turn a personal story connected with that topic. These were the topics of the storytelling circles:

A SPECIAL PERSON

A CELEBRATION

AN OBJECT

A PHOTOGRAPH



## Results and Examples

- a) When the responses to the first part of the template concerning autobiographical practices were collected together and reviewed, it became apparent that women write about themselves much more than men do. But people in general like writing diaries (especially when they are young) and also letters and emails. Many people like keeping reminders of their life especially in case of important celebrations (holidays, Christmas, historical events). The most common are photographs, videos, newspapers, souvenirs (in particular, it seems, ‘fridge’ magnets). People like writing about themselves when there are strong emotions, memories of happiness or despair which they want to express or to pass on to future generations. They do not want their experience to be forgotten.
- b) The results of the listing of autobiographical memories in four phases of life were quite remarkable. Despite the different nationalities, ages and socio-cultural backgrounds of the participants, there were recurrent memories described from the different stages of life. Some examples:

### CHILDHOOD

*The birth of a brother or sister; the family pets; particular toys; illnesses; nice sensations; poverty; first times (the first time I rode a bike, saw the snow, ate a particular kind of food)...*

### TEENAGE

*Friends; the driving licence; first love; first parties; school; fashion (mini skirt, bikini, blue jeans); first times (first cigarette, first vote, first holiday without parents)...*

### ADULTHOOD

*University; graduation; wedding; birth of children; buying a house; the family car; work; divorce; first health problems; death of a relative...*

### LATER LIFE

*Birth of grandchildren; hobbies; retirement; holidays, health problems; death of relatives and friends*

Some of the “personal stories” written were extensive and full of emotion. Often they served to locate the writer in a particular historical period, or show how they were affected by/close to a particular historical/ political/international/sporting event.



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- c) Participants at Rome connected their memory lists with the categories introduced to them in the first session of the international meeting. The point of this exercise was to encourage analysis of why some things are remembered and not others. Memories recalled, it was suggested, link to what we are currently concerned about and/or are interested in. Memories not only help to remind us who we were but also, when reflected on, help us to realise who we are at present. So this exercise encouraged reflection not only on the act of remembering but also on "why" we remember. What is the implicit intentionality that is behind our acts of memory? These memories are still part of our present life and can help to guide our future.
- d) In the second session at Rome - in the storytelling circles – it transpired that many participants could not talk or read about their memories of a “special person” or a “photograph”, for example, without emotion. There was sadness, regret, laughter and tears. Autobiographical memory expressed in such a context, it seemed, could create very strong emotions. Participants, even the most shy and reluctant ones, bore witness to the fact that we care about what we remember of our past lives and that, in recalling and communicating the memories, those which carry powerful emotional overtones, come to the forefront.

### Conclusions from our work

We thought that we were dealing with deep and intriguing issues and only had time to move across the surface. Most of the Project participants really enjoyed the work and discussion involved in this part of the Project. They thought that working with autobiographical memory was a good way to improve memory and to increase confidence in one's ability to remember. They concluded that it helped them to understand the importance of looking for connections between memories, of having memory frameworks, of making sense of memories and it reminded them powerfully of the important connection between emotion and memory. They felt that the act of remembering could contribute to feelings of self-worth, to recognise who one had been, who one was and who one could be, in one's life.

*(For more on autobiographical memory see Chapter 3.1 and sources 21 – 24 in the Appendix)*

### Project Activity 4a: Attitudes towards Memory

#### What was the topic?

During the fourth round of local activities we discussed attitudes towards memory and beliefs about memory in later life.



There is significant research which confirms that attitudes and beliefs about memory in old age may influence the memory functions of seniors, e.g.:

- age differences in memory performance are influenced by negative cultural beliefs about the impact of ageing on memory;
- activating negative stereotypes of ageing can cause older adults to perform more poorly on subsequent memory tests;
- seniors with positive age stereotypes lived significantly longer than those with negative stereotypes;
- interventions aimed at changing beliefs and expectations about memory do not only yield the expected improvements in subjective judgments but also lead to improved memory performance;
- better results in memory tests are not enough to change attitudes towards memory.

**A belief** is the psychological state in which an individual holds a conjecture or premise to be true.

<http://en.wikipedia.org/wiki/Belief>

An **attitude** is an expression of favour or disfavour toward a person, place, thing, object, event, idea or just anything in your environment. Attitude can be formed from a person's past and present. Attitude is also measurable and changeable as well as influencing the person's emotion and behaviour .

<http://en.wikipedia.org/wiki/Attitude>

Why is it so bad to have negative attitudes and beliefs about memory? It is because they seem to work as self-fulfilling prophecy. For example, if you are sure that you will not be able to remember the name of a new acquaintance, then that will happen because you will not concentrate on the name, nor even try to remember it. Many people also think that a good or a bad memory depends on age and forget that there are external and emotional factors that are much more relevant in determining the good or bad performance of our memory.

So, during this phase of our project, the period of the fourth Project activity, we tried to assess:

- how do older people perceive their memory?
- what attitudes towards memory and beliefs about memory in later life do older people have?
- what are the major problems concerning memory and ageing (in the opinion of the older people participating in the Project)?
- to what extent are problems with memory reported by older people real?



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- is it possible that the source of older people’s memory problems lies with their attitudes and beliefs towards memory?
- to what extent do the problems with memory, reported by older people, depend on themselves and what they do about them?
- if some memory problems in later life are connected with attitudes and beliefs, how can they be changed?

## How did we work?

We prepared a number of different exercises which were tried out by project participants. In these exercises we had questionnaires measuring an older person’s attitudes towards own memories; surveys in which the beliefs of an older person and the beliefs of a friend or companion of that person about the former’s memory functioning were compared; and enquiries into myths held about memory in older age.

Each exercise had 2 stages:

1. The participants followed the instructions, completed questionnaires and discussed results.
2. The participants discussed the strong and weak points of the exercise and tried to answer the questions “what can we conclude from it?” and “how can we improve it?”.

Each partner country chose two exercises to try out with its group of older people. Results of the work at the local level were sent to one coordinator who compared all the results and prepared the final report with conclusions which was presented and discussed during the international meeting in Athens.

## Examples of exercises and templates

### 1. “When was the last time I had a good memory?”

**Aim:** to discuss with participants what factors affect their own memory function and to give them basic knowledge about its functioning.

**Instructions:** Participants discussed in pairs or small groups the question “what was the situation the last time you had the feeling that your memory was 1) very good 2) very bad”. They wrote down their answers and tried to find common elements. The exercise was completed with discussions about factors that affect our memory functioning and reference to basic knowledge about memory.



**Conclusions** we tend to have good memory when (examples from the participants' responses):

- 1) we are in situations of emergency or fear – emotional situations;
- 2) we are in carefree situations, with positive feelings, relaxation and peaceful minds;
- 3) we are very determined and motivated and we want to succeed in something – e.g. remembering important dates;
- 4) we can rely on the association with images;
- 5) something is usually done in an automatic way as a routine and so we do not memorise it intentionally but unconsciously;
- 6) we apply memory strategies that we have learned.

We tend to have bad memory when (examples from the participants' responses):

- 1) we are living a period of tension or a moment of shock;
- 2) we are distracted by something else and do not remember to do things we should do (e.g. working on PC while cooking);
- 3) we are distracted when we should fix the information to be remembered (e.g. we do not listen to people speaking);
- 4) something is not done or used very often but only occasionally, so we do not have time to fix it in our mind (for example a code or a number);
- 5) we decide not to remember.

When we looked at the above list we could see that:

- nervousness, stress and distraction are the big enemies of our memory.
- memory is closely connected with habits, practice and emotions, which very often dictate to us when and what to remember or forget,
- good or bad memory may be connected with many different factors, not only age, e.g. emotions, motivation to remember/recall information, external conditions, the memory strategies we use etc.

## **2. “Memory in young and old age”**

**Aim:** to see how people in different age-groups judge their memory; what memory problems they have; how to break down stereotypes about memory in older age.

**Instructions:** Participants were asked to find some younger people who would like to share feelings with them about memory. Both groups (older and younger people) filled in a questionnaire about memory problems. Answers were summarised and then a group discussion was held with the older participants about: what kind of problems are reported by younger people; what kind of problems are reported by older people; are they similar or different?; why?; are any memory problems typical for older people?



# „Memory in Later Life“ Partnership Project Handbook

## Template:

	<b>“Memory in later life: learning - supporting – developing” Grundtvig Learning Partnership Project 2012 - 2014</b>				
<b>Questionnaire</b>					
AGE:	GENDER:				
1. My memory is (in general):	1 very bad	2 bad	3 so-so	4 good	5 very good
2. Compared to the memory of my peers my memory is:	1 much worse	2 worse	3 the same	4 better	5 much better
3. I have the biggest problems with remembering/recalling:	<i>e.g. numbers, names, jokes, facts etc.</i>				
4. I have no problem with remembering/recalling:	<i>e.g. films, books, historical events, book titles etc.</i>				
5. My ability to remember information in the moment (e.g. password) is:	1 very bad	2 bad	3 moderate	4 good	5 very good
6. My ability to remember names of people I meet occasionally is:	1 very bad	2 bad	3 moderate	4 good	5 very good
7. My ability to remember new words is:	1 very bad	2 bad	3 moderate	4 good	5 very good
8. My ability to remember about things that I'm going to do (should do) is:	1 very bad	2 bad	3 moderate	4 good	5 very good
9. My ability to remember my family and friends address is:	1 very bad	2 bad	3 moderate	4 good	5 very good
10. My ability to remember information from the newspaper/book I have just read is:	1 very bad	2 bad	3 moderate	4 good	5 very good
11. My ability to remember that I closed the doors, window, turn of gas etc. is:	1 very bad	2 bad	3 moderate	4 good	5 very good
12. My ability to remember telephone numbers to important for me persons is:	1 very bad	2 bad	3 moderate	4 good	5 very good
13. My ability to remember where I put my keys, glasses or other important daily things is:	1 very bad	2 bad	3 moderate	4 good	5 very good
14. My ability to remember how to get to the place I were earlier is:	1 very bad	2 bad	3 moderate	4 good	5 very good
15. My ability to remember jokes is:	1 very bad	2 bad	3 moderate	4 good	5 very good
16. My ability to remember book titles and authors is:	1 very bad	2 bad	3 moderate	4 good	5 very good
17. My ability to remember about thinks that I should take with me when I'm leaving home is:	1 very bad	2 bad	3 moderate	4 good	5 very good
18. My ability to remember meanings of words that I know earlier in my life is:	1 very bad	2 bad	3 moderate	4 good	5 very good
19. My ability to remember important for me dates (e.g. family members birthdays, friends events) is:	1 very bad	2 bad	3 moderate	4 good	5 very good
Finally, please assess to what extent are you satisfied with the functioning of your memory:					
1 very dissatisfied	2 dissatisfied	3 neither dissatisfied or satisfied	4 satisfied	5 very satisfied	
<i>Thank you!</i>					
© Memory XL Project					



Conclusion: This comparative exercise can show older participants that their memory is not so bad and even, in a few aspects, is better than in young people.

## Conclusions from our work

Our work in this round of local activities shows that it is useful to talk with older people about their beliefs about memory and to try to change their negative attitudes towards their own memory functioning. Even in a group of well-educated older people, who have a considerable knowledge about memory, there are those who have negative attitudes and beliefs about their own and their peers' memory. Exercises can be constructed which are concerned with the presentation of basic information about memory and how it works, especially in older age. Presenting older people with such knowledge is a starting point for changing negative attitudes towards memory. But the knowledge is not enough – sometimes we need to feel in ourselves that such knowledge concerns us. Things that we experience for ourselves become not just an element of general knowledge, but also may be integrated into our life experience. If we feel something, we have more belief in it!

Our experience shows that the exercises, constructed to demonstrate stereotyped thinking on memory in later life, should be presented at the beginning of memory training courses or work in discussion groups. They can help group leaders to:

- firstly – diagnose how a group of older people are perceiving their memories;
- secondly – suggest to them that their stereotyped and negative attitudes towards memory may have a negative effect and that, if so, it is important to change them;
- thirdly – help to start discussion about to what extent some myths about memory in later life are real and should be changed.

It would be worth concluding memory training courses with a discussion about attitudes towards memory. This might include:

- presentation of data from research showing how beliefs affect memory functioning. The evidence should be both convincing and valid.
- discussion about real memory problems and the fears connected with them. There should be attempts to invalidate myths about memory in later life and to build the self-belief of older people in this area.

Our work has also shown us that, when working with groups of older people, it is very important to find examples of when older people's memory is working well and to concentrate on memory strengths rather than fears about memory loss, which is less effective.

**Recommendation for the future:** creating new exercises that help seniors to change their negative attitudes toward memory. (*See more on this topic in source 25 in the Appendix*)



## Project Activity 4b: Aesthetic experience

### What was the topic?

The Project (local) activity in the late autumn of 2013 and the winter 2013/4, between the international meetings in Rome and Athens, was concerned with older people's attitudes to memory and whether negative and dysfunctional attitudes to memory can be changed. The activities undertaken by national groups in relation to Project activity 4(a) explored what older people's attitudes to their own memories were and considered in part whether they might be altered by exposure to, for example, other people's attitudes, friends and relatives' assessments of their ability to memorise and scientific knowledge. However, alongside this activity there developed a debate among Project coordinators about the enduring nature of embedded beliefs and stereotypes and of the difficulties of changing them among (perhaps especially among) older people. It was agreed to look at educational methods available to address this difficulty and then to make time to work with one of them in national groups. After some discussion, it was agreed to examine the recommendations of one school of adult education thought which argued the place of critical reflection, using aesthetic experience, as a tool for undoing assumptions and stereotypes and clearing the way for new learning and positive attitudes to memory. The approach can be found described in the publications of Alexis Kokkos (*see reference in Chapter 4*).

The critical contention is that works of art (paintings, sculpture, literature, films, poetry, music, etc.) can be legitimately regarded as open to interpretation and that debate about them can provide a sort of training arena for challenging fixed points of view. Interestingly, John Dewey observed that “the meeting of old perceptions with new ones emerging through the contact with Art, results in the reconstruction of the past and strengthens our ability to form new ways of comprehension”. The suggestion is that feelings are blended with ideas and that the development of cognitive functions, strengthened by aesthetic experience, leads to new understandings

### How could we apply these ideas?

According to Kokkos, adult educators and facilitators should work through a number of stages when they are trying to use aesthetic experience as a pathway along which learners may find their way to critical reflection and the re-examination of their attitudes and assumptions. The stages are as follows:

1. The need to examine a topic critically and creatively can be identified most often when



- a) learners' taken-for-granted beliefs on a specific topic may represent personal or cultural stereotypes
- b) there is a question, an issue, a dilemma which will lend itself to group reflection and expression of thoughts and feelings
- c) the tutor/facilitator can see a role for works of art in the creation of an open and relaxed climate for reflection but also the expression of contrasting points of view.

2. Learners are invited to express their ideas on the specific topic, answering open questions. Ideas are discussed in sub groups and then in the full group. It is important that opinions, conclusions and assumptions are recorded for later examination.

3. Identification of sub-topics and the order of examining them are negotiated between tutor/facilitators and learners and critical questions are formulated.

4. Works of art which might be connected with a sub-topic are cooperatively identified and final selection of works of art to be discussed is based on a dialogue in which all arguments, advantages and disadvantages are put on the table.

5. The group discusses together the sub-topics using the works of art as a way into making points and asking questions:

- a) The tutor/facilitator encourages recognition of learners' assumptions around a sub-topic.
- b) The interrelated meanings derived from the works of art are explored and the ideas arising from the observations made lead to greater critical treatment of various parts of the sub-topic.

6. Assumptions underlying each stage of the discussion of the first sub-topic are looked for and recorded. When the group reached a final position, the assumptions contained in it are compared with those identified in the earlier stages of discussion.

7. Other sub-topics are treated in the same manner until all aspects of the topic have been debated. The learners' final assumptions are put together into a summary. This is then compared with the ideas expressed and recorded at stage 2 above.

In a crucial final stage (8), tutor/facilitators and learners identify together the assumptions made at each stage of the discussion. They try to work out how it happened, what the dynamic was and whether and how personally they moved their positions. The aim is that learners become more self-aware of their thinking processes and attitudes and are moved to a more fluid and flexible state in which they are open to new learning and are prepared to consider positions and ideas which they rejected before. The works of art have acted as catalysts – tangible and multi-layered objects of discussion – which have made it possible for individuals to express, explore and, potentially, change different attitudes and ideas.



This was the methodology for the exploration and changing of attitudes – specifically older people’s attitudes toward memory - which Project activity 4 b) sought to examine.

### How did we work?

Coordinators in the different partner countries had not been trained as tutor/facilitators of this approach but each followed the guidance, instructions and three templates/questionnaires prepared for them. The topic of “national anthems” was chosen for the exercise. It was a topic common to the experience of all participants in the Project and which might give rise to memories from any point in their life; it was a topic on which a range of views and emotions might be expressed.

Coordinators were asked to introduce the first session with their older learners, guided by a template which explained that “the purpose of this exercise is to explore a new way of learning” and that the topic was to be national anthems “used as a tool/ a subject for discussion and analysis focusing on memories, feelings, attitudes” (Stage 1).

A discussion was to take place to establish not only what the participants knew about their respective national anthems but also they thought about them, how they valued them and, in particular, how they rated them as works of art (Stage 2).



With the help of the group, the coordinator summarised the views, identified the points at issue about the national anthem as a work of art (particularly those which had emotional resonance) and agreed the further work which individuals should carry out to take the discussion of sub-topics further (Stages 3 and 4).



Participants brought to a subsequent meeting information which they had researched about their national anthem and, using two other templates/questionnaires, they reviewed systematically what had interested and/or surprised them about this information. They exchanged memories of occasions when the national anthem had figured significantly in their lives and what emotions had been associated. Some were able to analyse how their assumptions, attitudes, and even their emotions, with regard to their national anthem had changed over their lifetime and why (Stages 5 and 6). National groups were encouraged to move on to discussion of what such changes might mean in terms of permeability of attitudes and assumptions and to consider how their work, and its meaning, should be presented at the next international meeting in Athens (Stage 7). In Athens, varying presentations were made of the work on national anthems and its meaning. The topic of aesthetic experience, and of the ways mind, senses, memories, attitudes and emotions can be simultaneously activated, were approached in a number of different ways at this meeting, most notably through collective analysis of scenes from the film “Citizen Kane” and a visit to an archaeological museum (Stage 8).

## Results and Conclusions from our work

The topic of “aesthetic experience as a tool for memory stimulation and new learning” was a difficult one for the Project coordinators and participants to handle without prior experience. But all of them, in all partner groups, worked on it responsibly and with open minds. Some Project participants remained unconvinced that the methodology was successful but others became intrigued and stimulated by the possibilities and challenge which it presented. Some older learners steadfastly, to the end, refused to acknowledge their national anthem as a “work of art” but most thought that it was a clever topic to have introduced which led in many directions and which touched the memories of all.

The organisers of this exercise wrote reflectively:

*The power of Art as a tool to activate memory and question old habits, while creating a learning situation that promotes identification of assumptions, critical thinking and the ground for new knowledge acquisition in a pleasant and brain-motivating manner, is a critical comprehension by itself. To transform established beliefs, as dysfunctional as they may, is not easy. Reference points, values and predispositions are there for many years and learners should consciously feel the need to change them. Yet, even if educators together with learners have succeeded to scratch at least the upper level of their value system, the effort is worth-while, memory is fortified and new learning results as a consequence because of the experience.*

[See source 26 in the Appendix for a fuller discussion of the topic and for another example of a work of art used as a basis of memory stimulation and new learning.



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## Project Activity 5: Outcomes of Project activities

In Project (local) activity 5 between the Athens and Lancaster meetings, all Project participants (including coordinators) were asked to complete two questionnaires to i) summarise their views on memory at the end of the Project; ii) give their opinions on which parts of the Project they had found most useful; and (iii), in general, make evaluative comments on the whole process.

What follows is a presentation of the responses of 52 older learners from all six countries with occasional allusions to the views of national co-ordinators. Only some of the questions asked are reviewed here.

### **1) Which memory activities, approaches or methods covered by the Project have you liked most and/or regarded the most useful?**

Of course, there was a wide range of responses from older learners to what was a double question. Some learners particularly referred back to the fascination, early in the Project, of learning about other people's *personal* strategies for remembering.

However, some preferred methods of a significant number of respondents did emerge. Thus:

**autobiographical method**

was mentioned often as both useful and enjoyable. Interlinked mnemonic techniques such as:

**visualisation  
associations  
mind maps  
acronyms**

were referred to frequently.

Topics, rather than techniques, covered in the Project such as

**use of technology  
memories linked with senses  
interactive learning**



were valued and participants were glad that

### games

were not only enjoyable but also useful in relation to memory.



## **2) What have you learned from the Project?**

This rather open question was successful in giving the respondents freedom to be reflective and to make responses from a variety of perspectives:

**Thus, generally about memory, respondents had learned:**

*"memory is more important and more complex than I have ever thought"*

*"it was good to see that some things that we feel intuitively are confirmed by science"*

**about the memory techniques available:**

*"some new methods to improve memory"*

*"some techniques which help us in everyday memory situations"*

**about the importance of positive attitudes about memory:**

*"there are a lot of strategies and techniques to help our memory. We just have to choose the ones that are most suitable for us"*

*"we shouldn't become upset when sometimes we have some memory problems. All of us and also young people have some problems with recalling information "*

*"my memory is the same, but my attitude towards it has changed. I feel more confident and try to use some techniques I've learnt"*

**about memory, learning and life:**

*"more knowledge about memory and self-confidence in later life"*

*"memory training is a way to stay young"*

*"we have learned more about ourselves."*



*“it is not the age that matters, but what we want to learn”*

**that an international project was a comfortable and stimulating environment**

*“to identify problems individually, to discuss them locally and internationally and to share possible solutions – the outcome of this process is beneficial”*

*“from the point of view of the project topic I have learned that the problems concerning memory are the same in middle aged and elderly people of different European countries.”*

*“how important it is to have a supporting group in which we can learn, spend time and have a lot of fun together.”*

*“the opportunity to meet new people, make friends and explore an important subject”*

**Even coordinators claim to have learned from the Project:**

*“as a coordinator I have learned a lot about the different technical aspects of a European project: presentation, evaluation, dissemination. It was possible because of the cooperation of an excellent team of people extremely prepared, competent and stimulating”.*

### **3) What have you found most surprising in the Project?**

**things about memory**

*“everybody has some memory problems (I am not alone ) but they are ready to solve them with humour and apply new methods”*

*“there are so many different methods and techniques to improve your memory”*

*“the emotions provoked by talking about memories”*

*“there are so many stereotypes about memory and it is quite easy to change them”*

**things about learning in later life**

*“how many people learn even at old age”*

*“seniors are really open and interested”*

**things about being in an international project**



*"it was so easy to get into contact with the participants of the other countries and with their culture, and to work together"*

*"people from different countries were equally involved and motivated in the topic. Their attitude to memory and their strategies were very similar"*

*"seniors are really open and interested"*

*"how easy, pleasant and fruitful it was to work with a multicultural group"*



#### **4) Which parts of the Project have been difficult for you?**

Responses, again, were various and showed that some parts of the Project were challenging for at least some of the older learners:

*"scientific approaches"*

*"some questionnaires and tasks"*

*"uncertainty about the rationale of some of the local activities"*



*“trying to use techniques I do not trust and I do not believe”*

*“making myself understood in English”*

*“active participation in discussions when we had language problems”*

*“speaking with a microphone in front of many people listening to me, I felt uneasy”.*

## **5) Which of the mnemonic rules and methods introduced in this Project seem to you most likely to be of most use to seniors?**

Participants referred to some of the key elements of the Project activities:

*“all of the methods, techniques and approaches are convenient for all ages if addressed to all senses, emotions, etc. ”*

*“visualisation, rhyme , rhythm and music”*

*“to pay attention, to decide what they want to store and to repeat contents, names, titles if they seem important”*

*“exercises which move their imagination and associations”*

*“keeping notes, making lists, using post-it, putting things in order, repeating things they want to remember, discussing, keeping a diary, etc.”*

*“link new information with established information”.*

## **6) Which memory methods or approaches introduced in the Project seem to you most likely to be useful when seniors are in learning situations with younger people, even children?**

Intergenerational learning was a part of Project activity 4(a) but not all national groups had dealt with it. It is interesting that older learners seemed to have no difficulty in identifying the “fun”, active, emotion and sense-related elements of their memory learning as particularly appropriate for intergenerational work:

*“telling them autobiographical stories”*



“music, rhymes, art, acronyms”

“using positive emotions when we are trying to remember something – jokes, fun, laughter”

“all the strategies that include the use of senses are good: visual memory, rhymes, associations, repetitions”

“methods based on reading, physical activities, games”

“repeat many times what they want to remember but always in a new way (variety is important)”

“could be useful but were not mentioned in the project: dancing and theatre acting, in other words ‘doing things’ ”

“What is needed is an open mind approach even to things that are absolutely unfamiliar”.

## **7) What advice would you now give to other seniors who want to improve their memories?**

The responses were succinct and varied:

“learn and use various methods to improve memory and find engaging activities”.

“don’t worry too much when sometimes you have some memory problems ”.

“meet other seniors and try to develop a positive attitude towards your own memory”.

“keep your mind active: cultivate new interests and become fond of various activities, be always curious”.

“have a better lifestyle based on healthy diet and regular exercise

“avoid stress”.

“see things positively, enjoy every moment of life, communicate with people, have friends etc. ”

“stay curious and involved —lifelong learning”.

“Enrol in courses at your local adult education centre, community college or other community group”.



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*“Find people who are also interested in improving their memory. Learn something new! “.*

*“Never stop learning!”*

*“Play games, do crosswords”.*

*“Volunteer ”.*

*“Practise several rules and find the one or two working for you best.*

*“to take part in international projects”.*

*“look at our Project Handbook when it is ready”.*



## **8) Do you have a good memory?**

There was a full range of responses to this question. Most showed that respondents understood that it was a complex and relative question. For some, the answer would "depend" on the situation and the context. In a sense, the answer did not matter. If it was "no", one could still do something about the implications of that.

"Yes".

"Rather good but not perfect".

"It depends on how stressed I am".

"It depends on the situation and the topic".

"No, but I'm trying to develop".

"No, not really but I have learnt how to accept and live with this situation".

"I thought so, but I am less and less sure".



## Chapter 3 Recommended Memory Activities, Approaches and Methods

### Introduction

Chapter 5 of the previous section describes the responses, in the final local activity, by participants to questions about memory activities, approaches and methods which they had experienced during the Project. In particular, they were asked:

*“Which memory activities, approaches or methods covered by the Project are **liked most** by you and/or are regarded as **the most useful**?“*

and

*Which of the mnemonic rules and methods introduced in this Project seem to you most likely to be of most use to seniors?*

The answers were collected and summarised in each partner country, reported, collated and analysed for discussion at the final international Project meeting of coordinators and some older learners at Lancaster in June 2014. There had been a wide range of responses overall but there was a clear degree of convergence on the above questions. Those present at Lancaster divided into three international discussion groups to consider the responses and to agree which of the memory activities, approaches and methods seemed to carry the most support and could be said to be the recommendations of the participants in the Project. After a review of the summaries from the discussion groups, six recommendations emerged as the ones to be incorporated into this Handbook.

The six recommendations are described in the succeeding chapters of this section of the Handbook. The six recommendations relate to:

Autobiographical memory	Visualisation
Associations	Interactive learning
Senses	Games

Each of the six chapters is written by a different coordinator, one from each partner country. A broad template was followed in the writing of the chapters but authors were free to depart from the template when it did not fit what they wanted to say. There is some overlap between content of the chapters but that is necessary and logical because memory activities, approaches and methods are often best used in a related and interactive manner.



There is a final short chapter addressed to teachers and tutors of older people.

Sources are to be found in the Appendix and are quoted to support and extend what is written here.

## Recommendation 1: Autobiographical memory

### Rationale

“Autobiographical work” is based on remembering episodes in a person's life-history, connecting memories, focusing meanings, creating a story, finding the plot of a life. There are at least three aspects of the relationship between autobiography and memory which make the autobiographical approach a powerful way of developing memory:

- Autobiographical remembering has a cascading effect - one memory leads to another and another, revealing an event-rich past. Autobiographical work is a way of enhancing our memory and also of increasing our self - confidence in our capacity to remember.
- Writing or telling a life story implies the creation of a bigger picture of our life, focusing on connections, meanings, creating a plot and building new meaningful models. This shows us an approach to making the process of remembering easier, because we can remember a comprehensive sketch more easily than the scattered elements of an individual life and then we can locate the scattered elements in their proper place in the sketch.
- Using memory in a connected way, narrating and writing down our own story is, for adult learners , a way of enhancing our life experiences but at the same time it also represents a possibility of sharing stories with others, giving a personal contribution to society. This is a big motivation for being active with our memory, the feeling that what the person has lived can be interesting and useful for others. Testifying to our existence and our history before an audience of listeners is a strong motivator to remembering. Telling stories gives individuals the opportunity to use their memories in a positive way, to “take the floor”, to express their ideas and narrate the experiences of which they have been the protagonists.

In autobiographical work, all can use their memories and use them effectively and importantly. What we do when we write a life episode, or a full life story, is - somehow - to draw the meaning from our life, to reconstruct the unity across time which underlies our life. This is so, even if a life is continuously changing and our interpretation of the past has changed across time. Autobiography has been described as a “self-portrait”—a work of art that resembles the life that itself continues to take shape.



## Further advantages of autobiographical method

- Reconstructing our life story gives us experience and practice of successful remembering.
- There is the connection between memory and emotions: reviving and renewing our emotions brings us to remember and to feel again individual life experiences more strongly.
- The reconstruction of our autobiography is a way of learning and remembering freely and even privately, if that is what we wish, and needs be validated only by ourselves.
- There are several autobiographical narrative forms: autobiographical memoirs, letters, journals and diaries. But there are also new forms, such as personal notes, blogs, e-mails, as well as multimedia forms, such as digital storytelling. So learners can try different methods and exercise their creativity as they develop their memories through this approach.

## Limitations of autobiographical method

- For a few people going back to the past could trigger disturbing memories, so facilitators should be aware of this and understand how to support people with troubling memories.

## Examples of methodologies in autobiographical memory

- To create lists of memories, such as:
  - i) persons we meet, objects that have played a part in our life, places in which we have lived, etc.
  - ii) an autobiographical list of the important and fundamental experiences, values, beliefs, and knowledge in our life.
- Using a storyline, starting at an early period and moving through various stages e.g. school experience, experience of being a mother, a career path. The stories woven together are like a tapestry of which each section tells part of the story to build a picture.
- Objects and photographs from the past can trigger memories. These can be selected by the facilitator or by the person. If the former, the fact that the object is not a personal possession can be helpful for shy people.
- Creation of learning moments through communal experience because of the social dimension of listening and connecting with what others say about one's own remembered experience.



- Creation of a memory book into which pictures, photographs and memorabilia can be included to illustrate stories and prompt new memories.
- Creation of a memory box with emotional connections to the things placed in the box.
- Story-telling from the past (a year or an event that was significant): incorporating humour, optimism, connecting to one’s culture and significant people.
- Starting a diary: a way of being aware of each day and having a reference to people, events and feelings about each day. This can remain private or it can be shared in a group of people who come together to discuss the significance of their remembered experiences.



### The importance of autobiographical memory

The resonances of recovery of autobiographical memories may produce significant changes in a person. Autobiography helps us to see the bigger picture and how actions in the past have created our present and how we might take steps to ensure that the future is positive. This is a big incentive to exercising memory in this way.

Moreover, it provides alternative explanations so we might reframe the past and perhaps not judge ourselves or others too harshly and be forgiving of ourselves and others; it builds confidence in self in communicating details about the past with others and it raises awareness of the social, political, economic and historical contexts of our lives and how these have limited or facilitated the choices available to us at the time.

All of these are outcomes of the autobiographical approach to memory and of the development of skills of accurate and connected recall and are stimuli to further autobiographical work.

(See also Chapter 2.3 and sources 21 - 24 in the Appendix)

## Recommendation 2: Associations

### Rationale

Our memory works like a network of interconnected elements – words, concepts and ideas are interlinked and create chains of associations. For example, stimuli such as the word “umbrella” will call up the associated word “rain”; “sleep” brings to mind “night” and “holidays” connect to “sun” or “fun”.

This knowledge leads us important memory rule: *linking and associating new information with what you already know will make it easier for you to recall it later.*



## How to train our ability to create associations between words/objects:

Associations are the result of linking particular words/objects with other words/objects by referring to their attributes, creating mental connection between them. This process can work by e.g.:

- a) similarity of features, e.g. ball – orange, pen – candle;
- b) concurrence in time or space e.g. umbrella – rain, spoon – fork;
- c) contrast, e.g. black – white, wet – dry, mess – order;
- d) "hidden similarity", e.g. homonyms like "lock" ("lock on a door", "lock of hair");
- e) accidental association resulting from personal experience, e.g. "The Name of the Rose" and " park", since you read the whole book in the park.

Most mnemotechniques - the systems of memory codes that enable and make it easier for people to remember, store and recall information and which can be found in "how to remember" books – are based on associations (e.g. The Link System, The Roman Room System, The Peg System. Mind Maps. etc.).

You can develop this for yourself by repeating an exercise in which you will take a word (eg. "cat") and then try to find as many associated words as possible using different ways of creating them (e.g. concurrence: "milk", "flap"; contrast: "dog", "mouse"; similarity of features: "tiger", "lion").

## Some important facts about associations:

### 1. Personal associations are the best

When trying to memorise something, it is crucial to construct your own, personal associations. It is, therefore, worth relating new information to yourself, looking for links between what you want to memorise and yourself, your experiences, your own previous knowledge. For instance, when you meet a new person called Zofia, you can associate her name with Latin Sophia – which means wisdom and trying to remember that new person visualising her in gown, with books, owl in hand (attributes of wise person). But you can also recall that Zofia is a name of your mother's best friend and try to find some characteristics which link or distinguish the two Zofias together (e.g both have blue eyes). Such personal associations will make it easier for you to remember the name of your new acquaintance.

#### *Example of a clear and personal association*

An elderly man was talking with a friend: "My wife and I tried a new Chinese restaurant the other night. It was really good. I think you and your wife would enjoy it."

**Friend:** Really. What was the name of the restaurant?

**Elderly man:** Oh, let's see, ....what WAS the name....I just can't quite think of it.....hmmmm..... what's the name of a flower.....really popular..... long-stemmed.....thorns....?

**Friend:** Rose??

**Elderly man:** Yes! That's it! Rose, what was the name of that new restaurant we went to the other night?



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## **2. Choose information that is well-known to which you can most effectively connect new information**

The important thing when connecting new information to information already known by you, is to ensure the existing information is itself easily retrievable and well -consolidated by you and that the associations you make are not too obscure.

## **3. Visualisation is also important**

Where is possible try to visualise your associations, build a vivid, colourful picture in your mind. It is easier for us to memorise things we can “see in our thoughts”.

## **4. Use your imagination, create different associations**

Build as many connections/associations as possible between new knowledge and different types of knowledge that you already have

### ***Examples:***

#### **a. How to remember new places you wish to visit or events**

Before a visit or event, check out the internet or a guide-book etc. so you have an idea of what you will see or hear. When you arrive at the place or event you should have a foundation of basic memory on which you can build by connecting what you experience in reality to what you read. Be conscious of what you want to learn and conscious of ways of forming associations. Such associations have to be meaningful for the individual. Try to think clearly about what you want to learn and why it is important to you. There is no formula that suits everyone.

#### **b. How to learn new words**

When you are learning words from foreign language try to find similar words in your own language or in languages you already know (e.g. for people who know Italian it is easier to learn Spanish). Sometimes it will be necessary to divide new words into pieces and create different associations for each of them. Connections between new words and previous knowledge can lean on similarity of meaning, sound or its appearance.



c. How to remember **names**.

You can use associations to remember someone's name and surname - trying to connect them with e.g. names of people we have known previously, some features of the person, similarity of his/her name to other words: so Mr. Greenwood is a person whom we can visualize in the green forest and the Latvian name “Skaidrite” sounds similar to the English word “sky”.



To summarise : *if you wish to remember something, connect new data to information you already remember, creating vivid, personal associations!*

*(See also Chapter 2a and source 16 in the Appendix)*

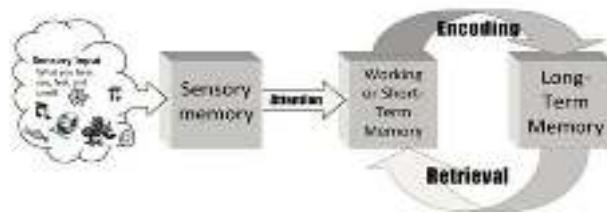
## Recommendation 3: Senses

### Rationale

Senses are very important for memory in learning situations. The more senses are involved during the learning process, the more effectively the information will be stored and recalled. Sensory stimuli are often followed by emotions and feelings experienced in the past and these emotions and feelings are a strong memory trigger when, consciously or unconsciously, memories of events, persons etc. are being recalled.

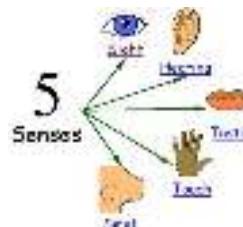
Environmental information is received by the senses, retained for a very short period in sensory memory and then transferred to different parts of the brain. A notable characteristic of sensory memory is that it allows our brain to make quick reactions and judgments before the information is processed by conscious thoughts.





So, in the effort to improve our memories, it pays to be aware of sensory memory and of the role the senses can play in helping us to remember. **Use of the senses, as many and as interactively as possible, is a spontaneous and intuitive way of increasing memory power.** Interaction between the senses, and the links this provides to experience and the emotions, supports retrieval of memories.

*Special attention should be given to the role of senses, where information from the outside world is encoded as chemical and physical stimuli, taken in by sensory receptors, the organs of senses*



## Types of Sensory Memory

- Visual (Iconic) Memory

Visual information on objects, places, animals, people, etc. is placed/ encoded in memory in a mental image (the “mind’s eye”) allowing us to remember it. Visual memory in education is a strong “tool” for learning, because it entails work with pictures, symbols, numbers, letters, words, for which learners will form an image in their minds and be able to recall later.

- Hearing (Echoic) Memory.

Echoic memories are stored for slightly longer periods of time than visual memories. It means that we remember sounds for up to four seconds after last hearing them. If we are asked to repeat a series of numbers someone has been reciting immediately after the sequence is complete, there is a strong chance of remembering all the numbers if we respond without delay or thought.



- Touch (Haptic) Memory

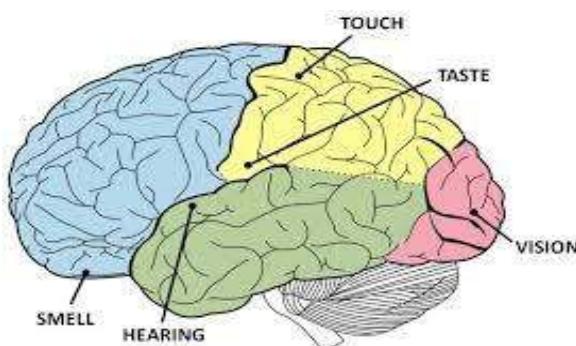
Memory traces of touch can last for only two seconds. Through our whole life, haptic cues and memory complement our visual experience and help us to comprehend our surroundings, a factor which can be of prime importance in later life.

- Smell Memory

Smell sensations are processed very close to the hippocampus and amygdala, the areas of the brain that are connected to the experience of emotion and emotional memory. Thus, smells may be more quickly and more strongly associated with memories than other senses and memories of a smell may persist longer, evoking powerful and vivid memories and emotions

- Taste Memory

There are five basic tastes: sweetness, sourness, saltiness, bitterness and "umami" = the taste caused by glutamic or aspartic acid usually found in savoury ingredients. People tend to like tastes experienced in the past and still remembered.



### Workshop on Senses and Memory at Szeged

During the second local activity, in national groups, participants had in different ways tried out and discussed the role of the senses in assisting memory. At the international meeting in Szeged, some of them joined in an exercise facilitated by the Greek partner. In groups of 4 – 5 persons, they compared the impact of a variety of sensory stimuli and reached interim conclusions on which sense memories were the strongest. The exercise was conducted as follows:

- a) The topic of sensory memory was presented and discussed in brief. Members of the group largely agreed that sensory information could often be easily retrieved by a relevant stimulus and would promote the recollection of past experiences and emotions (usually the happy ones).



b) An experiential activity in three parts followed:

1. A “basket” for each group had been prepared, containing a small bottle of olive oil, olives, sachets of a variety of aromatic plants and herbs, such as basil, laurel/bay leaves, rosemary, thyme, oregano, lavender, camomile, sage tea leaves, etc., dried figs, raisins and pistachios. Also included were pebbles, still smelling of the sea, and a card - different for each basket- representing a place characteristic of Greece, the partner country making the presentation. All items were packed in colourful sachets with labels giving useful information for each, as well as its name in the foreign language.

Example:

<p><b>ΔΕΝΔΡΟΛΙΒΑΝΟ = ROSEMARY</b></p> <p><b>Research has proved that the essential oil of rosemary is a strong natural aid to MEMORY strengthening and supporting.</b></p> <p><b>When dried, the rosemary is used in cooking, giving a perfect smell and taste to food.</b></p>	
	<p><b>ΔΕΝΔΡΟΛΙΒΑΝΟ</b></p> <p><b>Rosmarinus officinalis</b></p>

II. Groups were allowed 10 minutes to explore the contents of the baskets, using all their senses and then another 5 minutes to respond to the question “*which sense/s has/have been most stimulated and will probably lead to memories which are retaining longest?*

Group members were asked to stick a  post-it on a joint flipchart, under one of the senses (represented with pictures of the sense-organs), in order to indicate their first choices.

III. Then, group members were asked to stick another  post-it on the flipchart, against each of the senses coming next to their first choice, using different colours to indicate the order.



- c) While the results of this exercise were being collated, an additional final stimulus was presented. A video combining image and sound (the performance of a poem set to music) was played. Information about the poem and poet, the composer and singer were given after the individuals had enjoyed the video and then they were asked to comment on the impact of visual and echoic stimuli in relation to retaining a memory of the video in the future.
- d) The outcome was that the exercise engaged all those who participated. Everybody joined in with enthusiasm. They described the memories recalled, memories that would be retained for life, the emotions and feelings that had been created and their appreciation of the relaxed, pleasant and safe "training" environment in which the exercise was carried out. They said that they learned and valued the new information which accompanied the basket contents.

The consensus of participants was that combinations of types of sense stimuli seem to be the most powerful – particularly those of taste and smell. Immediately next came the sight and hearing senses, followed by touch, with almost no difference between them.

Participants concluded that senses are not only useful for everyday life, but they have the power of combining emotions and creating feelings that serve to generate, retrieve and retain memories. They may be particularly important in learning.



### Some learning possibilities using the senses

- a) If there is something you really want to learn and remember, why not deliberately involve one or more of the senses? For example, have near something you really like looking at; or have a piece of music playing to which you have an emotional response; or hold in your hand an object which you enjoy touching; or have a pleasant scent in the room; or suck something which has a strong taste.
- b) In learning about another country bring in food, songs, videos, pictures, objects with sensory stimulus to generate discussion and create a multi-sensory experience.
- c) Get out of the classroom and find alternative learning spaces - museums, galleries, exhibitions, concerts, theatre - where people can enjoy a whole experience of being together in a special building, a new space, and utilising all the senses. This heightens awareness, increases attention, creates optimal learning and maximises remembering.
- d) Arrange preparatory and linked sessions that draw on different senses. For example, have a discussion/ talk/ presentation about different kinds of theme (love/ power/ conflict etc.) and then visit a theatre/cinema where the theme is played out by actors. Afterwards arrange a post experience discussion, with different sensory triggers, to reinforce memory and explore different meanings.

(See sources 29 and 32 in the Appendix. Source 32 is an extended version of this Chapter)



## Recommendation 4: Visualisation

### Rationale

Pictures, diagrams and images are much more immediate than words. It is easier to remember them than words. The brain has a partiality to visual representations and, of course, vision has been important much longer in human experience than symbols or words.

Our brain consists of two halves. On the left side we find the centre of communication and computation. This side is responsible for what we would call “thinking”. It focuses on language, words, data; it deals in logic and analysis. The right side is focused on ideas, images and visual impressions. This side deals with imagination, feelings and fantasy.

To connect both sides while learning and remembering is the best way to store and recall information effectively. It is known that the more connections we can build while learning something the better we are able to remember, store and recall it.

So visualisation - seeing something in the mind (“the mind’s eye”) - is a powerful memory tool. The more elaborate a visualisation is, the more likely it is to be remembered well. So attaching a fact, formula, name, event etc. which is to be remembered to a picture or image that is colourful, detailed, vivid, dynamic and even fantastic is likely to be effective. Moreover, if the image is connected with good and positive feelings, the more likely it is to be remembered. Companies use this fact in advertising and brand placement.

Visualisation works with, and supports, any other kind of mnemonic method or technique.

Most of us make use of it when we are learning or trying to remember verbal information. Many people use colour pens or markers to highlight key points or information which need to be remembered and later try to make use of the highlighting to bring the key points back into the memory. Sometimes we write numbers in the air when we need to remember them.

Not everyone finds visualisation easy but everyone can improve their ability to visualise. The easier visualisation is for you, the more you can apply it to assist the memorising of everyday things and events.

### Examples of how you can train yourself to visualise:

- when you are standing somewhere (perhaps you have to wait for a bus or a train) look around and see what is near you. Then close your eyes and try to remember what you have seen. The more often you do it, the better you will be at it.



- walk through a garden or park, for example, and pick out a smell or scent - flowers, herbs, grass or other smells or scents. Stand for a while and work out what smell or scent it is. Try to draw a mental picture of it. Can you remember when you smelled it for the first time in your life? Or is there any special occasion connected with that smell? Try to remember and see these situations in your “mind's-eye”. What feelings does the smell give you? Attempt this exercise on different kinds of smells and you should improve your capacity to visualise.

Write down 15 words which come randomly and disconnectedly into your mind. See these words in your “mind's eye”. Then try to build the words into a story. The story can be fantastic and not at all logical. See the story in your “mind's eye”. Say it to yourself. Then see if you can repeat the 15 words in the order in which they appear in the story.

### Examples of how you can use visualisation

#### 1. Remembering names and numbers

- names

when you are introduced to somebody, listen carefully to his/her name. Ideally, repeat the name and try to get a mental picture of it. Associations which come into your mind are very helpful.

Example: you are introduced to Mr. Peter. Maybe you know the rhyme “Peter, Peter pumpkin eater....” So you can see Mr. Peter eating a pumpkin in your “mind's eye”. Repeat the image several times as you think of the name.

- numbers

It is often easier to remember numbers when they are visualised. The way to do it is to connect a number with a special symbol or image which best fits - in your opinion - that number.

Example: 0 is similar to an egg, 1 to a candle, 2 to a swan and so on. Visualise the images several times as you repeat the numbers to cement them into your memory. When you want to remember a telephone number, connect the different numbers by linking the images into a story and see this story in your mind's eye. These methods need practice but can be very successful.

#### 2. Learning a language

When you learn a language, combine a word which you want to learn with an image of it and see it in your “mind's eye”. While learning the word “aircraft” imagine an aircraft in your mind. Try to imagine the aircraft as concretely as possible: imagine the colour, the



wings and the windows, can you see people inside? Is it big or small? Activate your imagination. This can be done with nouns, verbs and even phrases.

Try to associate and imagine other words which connect with the word to be remembered. The word “aircraft” for example can be connected with: flying, holiday, eagle, altitude, sound, pollution, sky, clouds, birds etc.

Instead of imagining a picture you can also use small “real” pictures and pictograms, of course. When learning a new word, they can be written on a cue card and completed with a picture, pictogram or graphic. These combinations help you to memorise the new words.

This method works also quite well with other topics.



### 3. Learning other topics:

- For historical items, you can imagine the circumstances, the people and their clothes from the time you are learning about, special situations such as battles, movements, special circumstances such as the first man on the moon and so on.
- For geographical areas, you should use illustrated books, videos and illustrations from other sources of an area to stimulate your imagination to build pictures in the mind.

*(See also Chapter 2a and source 16 in the Appendix)*



## Recommendation 5: Interactive Learning

### Rationale

We are social beings and learning and remembering can occur very successfully when people are connecting with each other in an empathetic, enjoyable, safe and respectful way. Interactive learning and remembering can take place when we feel involved with others; it can generate a social and emotional process engaging the whole person, not just the intellect. We learn and we remember best when attention is engaged, when learning is active and co-operative, when memories can later be placed in a context and when there is a level of emotional arousal. Interactive learning and remembering, particularly in face-to-face groups, potentially provides all of these conditions. Therefore, the prospects of what is learned in such situations being remembered in the future are increased.

There is more chance of making connections between ideas, and generating new ideas, among members of a group reacting to each other than in isolated learning. Remembering who originated an idea, solution or conclusion, and with what manner, degree of certainty and even way of speaking, can help to bring the memory to mind. The process and nature of any discussion that followed may have the same effect. Discussion stimulates the communicating channels of the brain (the neural networks) and leads people to question their own understanding and reach a new or deeper appreciation – which is going to promote the activation and reinforcement of memory.

### Advantages

Learning and remembering with other people can often be more enjoyable than learning and remembering alone – thus creating feelings and emotions which strengthen memory.

Other learners may suggest perspectives and ways of remembering that may not have occurred to you. There are more potential sources of knowledge and reinforcement.

Interactive learning and remembering tends to engage all participants in a group and they have to be busy and active. They all have to give attention to what is going on. Attention is one of the necessary preconditions of remembering.

Your confidence, and potential for remembering, is increased when you find that you contribute material that is recognised, valued and extended by other people.

The senses (potentially all of them) are more likely to be involved in interactive groups and these will also trigger memory.



## Disadvantages

Interactive learning takes time. Sometimes group members may know less than you or may remember things less well. Sometimes you may not have access to a group wanting to learn and remember at the same time as you.

## Interactive Learning methods which will promote Memory

Interactive learning in groups can be **unstructured or structured**. Even if it is unstructured, thought could be given to composition of the group and there could be prior agreement about topics so that preparation can take place. Structured interactive learning could include, for example: i) the cut-and- thrust of a formal debate; ii) all members making a contribution on the topic(s) in turn; or iii) one member making an introduction and responding to points made by the others. There are many possible formats.

Breaking up into **sub groups** for exercises/ discussion to ensure everyone in a class has chances to speak and interact. In language learning this is absolutely critical for practice conversations.



There is some evidence that **intergenerational** interactive learning can be particularly successful in promoting memory

**Online courses** can be structured in a way which promotes interactive learning. The interface with the screen can require regular interaction if progress is to be achieved. Feedback can be

engineered deliberately to be supportive, stimulating, amusing and/or challenging. The associated feelings will promote remembering. There are also opportunities for interaction with other learners. As with a face-to face group, ideas can be shared, advice given, new perspectives opened up and mistakes corrected (for example, through a class blog controlled by the learners themselves) and these activities will re-inforce learning and remembering. You could invent faces or characteristics to be associated with the other learners whom you have never met or seen and thus make them, and what they contribute, more memorable.

## **Recommendation 6: Games**

### **Rationale**

Most people enjoy games and pitting their skills against one another in a friendly and non-aggressive way. Memory games can boost different types of memory and can be done alone or in groups. There are some key requirements that must be considered to make them effective memory-boosters. For example, they must be attempted consistently and they should not be too easy. It is advisable to try and practise various games in order to work with different parts of the brain and keep adding some new challenges.

### **Advantages**

- there are dozens of memory-training books and websites available
- most of them can be done any time anywhere
- they are good sources of entertainment and easy to understand
- they can help to integrate the different senses of the player which all contribute to memory
- they can improve concentration which makes memory more effective
- many computer games have been devised to improve speed of processing, peripheral vision, spatial ability (that improve driving skills), etc.
- if desired, scores achieved can be compared with those of others and in this way games can be good motivators
- there are various free online courses available
- most of them can be a challenge for all ages

### **Limitations**

- if they are not challenging enough, memory games may become monotonous
- they can be addictive



- some games require a technical device and an application (“app”) to function and these prevent those people who are afraid of modern technology from trying them out.



## Examples

- Card-matching memory games: a grid of face-down cards are placed in front of the players who try to find pairs. Two cards are flipped at a time. If they do not match, the cards are turned face down again. The player who matches the most cards at the end of the game is declared the winner.
- Trivia Quizzes: These games are a great way to improve recalling information. The trivia can be about anything – literature, films, history, geography, biology, etc. Although it is easy to find trivia quiz board games and books on the market, players can also make up their own questions. When players use a new set of trivia questions, they rely on their recall of prior knowledge and experience to find the correct answers. If they play with the same questions some time later, they will also rely on memory of playing the game last time. Both new questions and re-runs are good for strengthening the players' memory functions as well as boosting their memory storage.
- Chess, crosswords, Sudoku, Scrabble, dominoes, checkers, card games, etc.: Games that involve a lot of possible options for the brain to juggle are great memory boosters.
- Online courses: They are offered on various topics and are quite challenging for all generations.

- Online memory games: They focus on developing various memory skills and give your memory a good developmental workout. Players are usually asked to memorise and recall patterns, pictures, or strings of numbers, to complete puzzles, to identify missing elements, and so on. Most of the games can be tailored to the needs of the users who can choose from different difficulty levels to keep challenging themselves. To make these activities more fun, players can even compare their scores with those of others and post their scores to a global scoreboard to be ranked.
- Virtual visits to famous galleries and museums: These are stimulating and entertaining activities. Most of us half-recognise pictures or cannot place a title or artist. Virtual tours allow you to navigate through the panoramas of numerous exhibitions and to test out, and to improve, your memory. As you walk through the virtual space, you can select specific paintings for larger image views, close-up details, and more information. Both learning about new images and recalling old ones stimulate your memory. You can re-take a virtual walk and test how much better you remember the pictures the second time.



*Some websites providing virtual visits:*

- *The National Museum of Natural History (NMNH)* (a part of the Smithsonian Institution):  
<http://naturalhistory.si.edu/panoramas/>
- *The Louvre*: <http://www.louvre.fr/en/visites-en-ligne>
- *Uffizi Gallery*: <http://www.uffizi.com/virtual-tour-uffizi-gallery.asp>
- *The National Gallery, London*: <http://www.nationalgallery.org.uk/visiting/virtualtour/>
- Over 300 *Virtual Tours and Museums* around the World available at  
<http://www.virtualfreesites.com/museums.museums.html>



## Teaching, Learning and Remembering

What does the Project have to say that is relevant to the teachers and tutors of older learners? Obviously teachers want their learners to remember what they have learned and all of the Project activities described in this Handbook will be relevant to that goal. It is not necessary to list them all again here. Indeed, some of the participants in the Project were teachers of older learners themselves. They contributed their ideas on the most effective ways for teachers to assist the memories of their older learners in their classes (particular examples from teachers can be found in source 2 on mnemonic techniques In Part 2).

However, it may be useful to list some headline guidance for teachers of older people which can be said to have emerged from the Project. We could call it "TEACH" (Ten Easy And Constructive Hints):

### **1. DISCUSS MEMORY AND MEMORY TECHNIQUES**

Discuss how to remember with your older learners, whatever the subject of study.

Try to make them positive about their memories.

### **2. STRUCTURE THE MATERIAL**

This will help older learners to plan their personal strategies and mind-map connections.

### **3. BUILD ON PREVIOUS KNOWLEDGE**

Links with previous knowledge make new knowledge more easily remembered.

### **4. USE A VARIETY OF TEACHING AND LEARNING METHODS AND STYLES**

Give space and time for a range of memory techniques and maximise attention.

Emphasise active learning.

### **5. CREATE A RELAXED AND COMFORTABLE LEARNING ENVIRONMENT**

Which older learners will enjoy and recall with pleasure. Use humour.

### **6. ALLOW FOR INTERACTIVE LEARNING**

It involves positive feelings and emotions and requires attention.

### **7. USE VISUALISATION AND ASSOCIATION**

This gives opportunities for effective and easier remembering.

### **8. APPEAL TO ALL SENSES**

Consciously use interaction of all senses to make recall more effective.

### **9. ENGAGE LIFE EXPERIENCE**

Know who the learners are. Relate to their autobiographical memories, emotions and values and make possible links with previous knowledge and experience.

### **10. REVIEW MATERIAL**

So that what should be remembered is reinforced. Link new material with the material that has gone before it.



## Chapter 4 References and Resources: articles, books, videos and websites in six languages

### Articles

in English

**12 ways to keep your brain young:** Harvard Medical School (2000-6)

<http://www.health.harvard.edu/fhg/updates/update0606a.shtml>

Every brain changes with age, and mental function changes along with it. But cognitive impairment is not inevitable. Here are 12 ways you can help reduce your risk of age-related memory loss.

**Emotional memory and ageing: the role of emotional control.** Emotion researchers have discovered that as people get older, they experience fewer negative emotions and report better control over their emotions - <http://www.usc.edu/projects/matherlab/s/emomem.html>

**How to Improve Your Memory. Tips and Exercises to Sharpen Your Mind and Boost Brainpower** (updated 2014) by Melinda Smith and Lawrence Robinson -  
[www.helpguide.org/life/improving\\_memory.htm](http://www.helpguide.org/life/improving_memory.htm)

**Moderate exercise to boost brain power (Feb. 2011):** <http://www.bbc.co.uk/news/health-12325285>

BBC News story of research study. Moderate exercise increased the size of the hippocampus, an area of the brain that makes memories.

**Stop babying the elderly** - Music Educators Journal - [www.isme.org/ijme](http://www.isme.org/ijme)  
The effects of music on elderly wellbeing. Fighting society's stereotypes concerning seniors' mental abilities and interests.

**Teaching to remember ourselves: The Autobiographical Methodology,** Duccio Demetrio with contribuition by Chiara Borgonovi, Springerlink, 2005  
A chapter on the deep educational aspects of Autobiographical writing -  
[http://link.springer.com/chapter/10.1007%2F0-387-36899-X\\_12](http://link.springer.com/chapter/10.1007%2F0-387-36899-X_12)

**Transformative learning through Aesthetic Experience: towards a comprehensive method (2010)**  
Alexis Kokkos Journal of Transformative Education - <http://jtd.sagepub.com/>



Presentation of a new methodology based on the observation and critical analysis of Art, in order to enhance one's critical perception, question old beliefs and free memory and learning abilities at all ages.

in Greek

**Εργαζόμενη μνήμη και γλωσσική ανάπτυξη** (Working memory and linguistic development ), Ψυχολογία- το περιοδικό της Ελληνικής Ψυχολογικής Εταιρίας (Psychology – the journal of the Hellenic Psychological Society) – [www.elpse.gr/periodiko/](http://www.elpse.gr/periodiko/)

**Η αντιμετώπιση του γήρατος δια μέσου των αιώνων** (The aging through the ages) : Εγκέφαλος - Αρχεία Νευρολογίας και Ψυχιατρικής ( Journal Encephalos – Archives of Neurology and Psychiatry) – [www.encephalos.gr](http://www.encephalos.gr)

**Νευρολογία στις παραστατικές τέχνες** (Neurology in pictorial arts), Encephalos Journal : [www.encephalos.gr](http://www.encephalos.gr)

**Μνήμη και μάθηση** (memory and learning) : Λήκυθος, Βιβλιοθήκη Πανεπιστημίου Κύπρου ( <https://lekythos.library.ucy.ac.cy.>)

**Οι δρόμοι του μυαλού** (Ways of the brain) : [www.vita.gr/html/ent/205/ent.1205.asp](http://www.vita.gr/html/ent/205/ent.1205.asp) **and 10 tips για να αποκτήσετε μνήμη ελέφαντα** (10 tips to acquire an elephant's memory) : [www.otherside.gr/2011/08/10-symvoules-mnimi-elefanta/](http://www.otherside.gr/2011/08/10-symvoules-mnimi-elefanta/)

**Η ανατομία της μνήμης** (The anatomy of memory) : Ψυχοθεραπεία και Συμβουλευτική (Psychotherapy and Counselling Journal), [www.psychology.gr/the-team/67-mersinias-thomas.html](http://www.psychology.gr/the-team/67-mersinias-thomas.html) **and**

**Ισχυρή μνήμη, μια διαδικασία δια θίου άσκησης** (Strong memory – a lifelong process) **and** **Μνήμη, Τύποι μνήμης, Τεχνικές ενίσχυσης της μνήμης, Μνήμη και Γήρας** (Memory, Types of memory, techniques to strengthen memory, Memory and Aging) : <http://www.iatrikokentro.gr/sites/default/files/IATREIOMNHMHS.pdf>

**Τρίτη ηλικία – μια νέα αναπτυξιακή δύναμη** (Third age – a new developmental force),

**Να μη ξεχάσω να θυμηθώ** (Let me not forget to remember) **and**

**Υγιεινή διατροφή στην Τρίτη ηλικία** (Healthy food and third age – research findings : the American Dietetics Society) : Proceedings ‘the World Day for Third Age’ conference : [www.healthinvest.gr/category/elderly](http://www.healthinvest.gr/category/elderly)



**Κριτικός στοχασμός και Τέχνη στην εκπαίδευση** (Critical reflection and Art in adult education),  
Journal Adult Education : [www.adulteduc.gr](http://www.adulteduc.gr)

in Hungarian

**Tanácsok a memória fejlesztéséhez** - <http://www.vital.hu/memoria-fejlesztese> - Az időskorral együtt járhat a memória gyengülése. A cikkben egyszerű tippeket, módszereket olvashatunk, melyeket a memória javításának szolgálatába állíthatunk.

**Könnyebben fejleszthető a memória, mint gondolnánk -**

[http://www.vital.hu/beszelgetes\\_memoria\\_intelligencia](http://www.vital.hu/beszelgetes_memoria_intelligencia) - A cikk egy kutatásról számol be, mely szerint a társas érintkezések, beszélgetések fontos szerepet játszhatnak a memória fejlesztésében.

**Ádám György: Pszichofiziológiai szemlélet az emberi tanulásról és emlékezésről -**

[http://mta.hu/data/cikk/12/69/41/cikk\\_126941/7\\_Neurobiologia/Tanulas\\_Memoria.pdf](http://mta.hu/data/cikk/12/69/41/cikk_126941/7_Neurobiologia/Tanulas_Memoria.pdf) A cikk az agykutatás memóriával kapcsolatos eredményeit gyűjti össze

in Italian

**Aforismi e citazioni sulla memoria** - Famous quotations and aphorisms

<http://www.aforismario.it/aforismi-memoria.htm>

**La perdita di memoria nella vecchiaia è un fenomeno reversibile**

This article, based on a recent research of Yale University, suggests that there are a lot of things we can do to modify the aging process of neurons in old age.

<http://www.scienze-naturali.it/news-eventi/primo-piano/la-perdita-di-memoria-nella-vecchiaia-e-un-fenomeno-reversibile>

**Leggere e scrivere aiuta gli anziani a conservare la memoria**

A recent research carried out by the Rush University Medical Center has shown that reading and writing throughout our life can improve our memory up to 15% in our old age

<http://www.libreriamo.it/a/4510/leggere-e-scrivere-aiuta-gli-anziani-a-conservare-la-memoria.aspx>

**Una teoria dell'autobiografia**

An article about how our memory selects the events of our life that will form our autobiography  
<http://www.leparoleelecose.it/?p=2984>



## Books

in English

**Ageless Memory: The Memory Expert's Prescription for a Razor-Sharp Mind** - Harry Lorayne (2010) - <http://www.amazon.co.uk/Ageless-Memory-Experts-Prescription-Razor-sharp/dp/1579128246>

**Age Proof Your Brain and Sharpen Your Memory by** Tony Buzan (2011)  
<http://www.amazon.co.uk/Age-Proof-Your-Brain-Sharpen-Memory/dp/0007233108>  
See below for more Buzan books.

**Brilliant Memory Training: Jonathan Hancock (2011)**  
[http://books.google.co.uk/books?id=I\\_oh96RlxQoC&dq](http://books.google.co.uk/books?id=I_oh96RlxQoC&dq)  
A step by step guide to build and boost memory to reach our full potential.

**How to Develop a Brilliant Memory Week by Week:** Dominic O'Brien (2014)  
<http://www.amazon.co.uk/How-Develop-Brilliant-Memory-Week/dp/1780287909/>  
Tried and tested strategies and tips to expand your mental capacities at a realistic rate to make your memory bigger, better and sharper, week-by-week.

**How to Remember Anything You Want** (2011): Tony Buzan - <http://www.amazon.co.uk/Memory-Book-Remember-Anything-Want/dp/1406644269>  
Buzan has been writing books on the brain, learning and memory for years. See his website for many other books and software, including mindmapping – <http://www.tonybuzan.com>  
Translated into many languages.

**How to Improve Your Memory Using Simple Memory Improvement Techniques [Kindle Edition]**  
<http://www.amazon.co.uk/How-Improve-Memory-Improvement-improvement-ebook/dp/B00KQOOI9W/>

**The Man Who Mistook His Wife For a Hat** – Oliver Sachs (1985)  
<http://www.amazon.co.uk/Man-Who-Mistook-His-Wife/dp/0330523627> - Stories of the awesome powers of the mind and just how delicately balanced it has to be.

**The Nostalgia Factory: Memory, Time and Ageing** by Douwe Draaisma (2013) -  
<http://www.amazon.co.uk/The-Nostalgia-Factory-Memory-Ageing/dp/0300182864>  
Weaving stories and science into a compelling description of the terrain of memory.  
Translated into many languages.



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**Soft-Wired:** Dr. Michael Merzenich (2103): <http://www.soft-wired.com>

How the brain rewires itself across the lifespan, and how you can take control of that process to improve your life.

in German

**Das Buch des Vergessens** - <http://www.amazon.de/Das-Buch-Vergessens-Erinnerungen-verändern/dp/3869710616/>

*Warum Träume so schnell verloren gehen und Erinnerungen sich ständig verändern*

**Das menschliche Gehirn für Dummis** von Frank Amthor - <http://www.amazon.de/Das-menschliche-Gehirn-für-Dummies/dp/3527709134>

Ein kompakter aber nicht zu knapper Einstieg in alles, was sich im Gehirn so abspielt. Teils mit Witz geschrieben und gut verständlich.

**Der Mann, der seine Frau mit einem Hut verwechselte** von Oliver Sacks: Also, Eine Anthropologin auf dem Mars“. Oliver Sacks ist Arzt, Professor für Neurologie und Schriftsteller. Er ist Autor einer Vielzahl von Büchern, die eine Sammlung von Fallstudien von Menschen mit neurologischen Störungen beinhalten.

**Der Schlüssel zum perfekten Gedächtnis** von Timo Mistler - <http://www.amazon.de/Der-Schlüssel-zum-perfekten-Gedächtnis/dp/3873875292>

In diesem Buch wird das Basiswissen der Mnemotechnik vermittelt. Es werden einzelne Techniken anhand alltäglicher Merksituationen vorgestellt.

**Die Grips-Formel: Entfesseln Sie Ihr geistiges Potential** von Tony Buzan:-

<http://www.amazon.de/Die-Grips-Formel-Entfesseln-geistiges-Potenzial/dp/3636071858>

Tony Buzan ist ein britischer Mentaltrainer und Autor zu den Themen Kreativität, Mnemotechniken, Schnelllesen und Lernen. Er ist bekannt geworden durch die Mind-Map-Methode, deren „Erfinder“ er ist.

**Die Metaphernmaschine** von Douwe Draaisma: / Also „Die Heimwehfabrik: Wie das Gedächtnis im Alter funktioniert“ / „Warum das Leben schneller vergeht, wenn man älter wird.“ / „Das Buch des Vergessens“ .

**Geistig fit** von Gesellschaft für Gehirntraining\_ Geistig Fit, Zeitschrift mit Übungen zum Gehirnjogging, erscheint 6 mal jährlich. Daneben gibt es verschiedenen Themenhefte und Jahressammlungen



Informationen gibt es unter:

<http://www.gfg-online.de/index.html?frameurl=http://www.gfg-online.de/zeitschrift-geistig-fit.html> und <http://www.ohlberg-kinesiologie.de/Senioren-geistig-fit-bleiben>

**Jung im Kopf** von Martin Korte (2012) - <http://www.amazon.co.uk/Jung-Kopf-Erstaunliche-Gehirnforschung-%C3%84lterwerden/dp/3421044341>

Erstaunliche Einsichten der Gehirnforschung in das Älterwerden. In 6 Kapiteln geht dieses Buch auf das Mythos ein, das die Denk- und Lernfähigkeit im Alter zurückgeht und wie man den Alterungsprozess des Gehirns beeinflussen kann.

**Wir sind Erinnerung** von Daniel Schacter - <http://www.amazon.de/Wir-sind-Erinnerung-Daniel-Schacter/dp/3499611597>

In dieser Abhandlung werden mit psychologischen und neurophysiologischen Methoden Funktionsweise, Bedeutung, Mängel und Grenzen des menschlichen Gedächtnisses erforscht.

in Greek

**Να μη ξεχάσω: Θωράκισε από νωρίς τη μνήμη σου**, Zaldy S. Tan (Let's not forget – protect your memory - starting early - [www.uclahealth.org/ZaldyTan](http://www.uclahealth.org/ZaldyTan)) [www.KRITIKI Publishing.gr](http://www.KRITIKI Publishing.gr)

**Αναζητώντας τη μνήμη**, Kandel E.R. (Searching for Memory) : <http://www.cup.gr>

**Η τέχνη της μνήμης**, Frances A. Yates (The art of memory):

<http://www.politeianet.gr/books/9789602505519-yates-a-frances-miet-morfotiko-idruma-ethnikis-trapezis-i-techni-tis-mnimis-chartodeti-ekdosi-217857>

**Όταν η μνήμη αποκαλύπτει**, Jacqueline de Romilly (Revelations of memory):

[www.tovima.gr/books-ideas/article/](http://www.tovima.gr/books-ideas/article/)

**Ξαφνικά η μνήμη μου άρχισε να θυμάται**, Τούλα Βλαχούτσικου (Suddenly my memory started remembering, Voula Vlachoutsikou) : [www.politeianet.gr/index.php](http://www.politeianet.gr/index.php)

**Για να δει τη θάλασσα**, Evgenia Fakinou (To see the sea, Evgenia Fakinou)

[www.greekbooks.gr/books/logotehnia](http://www.greekbooks.gr/books/logotehnia)

**Οι ραψωδοί της γνώσης**, Ursula K. Le Guin (The Telling): [www.en.wikipedia.org/wiki/The\\_Telling](http://www.en.wikipedia.org/wiki/The_Telling)

**Η εκπαίδευση στην Τρίτη Ηλικία**, Chelsea-Anastasia Lazaridou (Education in Third Age):

[www.adulteduc.gr/001/ekdoseis/lazaridou.html?TB\\_iframe=true...](http://www.adulteduc.gr/001/ekdoseis/lazaridou.html?TB_iframe=true...)



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



## in Hungarian

**Weiss, Donald H.: Hogyan fejlesszük memóriánkat?** Budapest : Park K., 1991. (Menedzserek kiskönyvtára) 58 p.

A könyvben egyszerűen elsajátítható módszereket találhatunk, melyek megmutatják hogyan fejlesszük a memóriánkat, hogyan javítjuk koncentrációt, és hogyan javítjuk a tanulás hatékonyságát.

**O'Brien, Dominic: Memóriafejlesztés : a nyolcsoros memória-világbajnok módszerével .**

Budapest : Trivium, 2011. 207 p.

Dominic O'Brien nyolcsor nyert memória–világbajnokságot. 1994-ben Angliában az Év Agya címet nyerte el, és még számos megtisztelő elismerést kapott kiváló memóriájáért. Nem született csodagyereknek, sőt: az iskolában sok problémája akadt a tanulással. A szerző érhetően fogalmazva, világos magyarázatokkal adja át módszerét az egyszerű gyakorlatoktól az egyre bonyolultabbak felé haladva.

**Schlögl, Attila : Az ember feje nem káptalan? : emlékezetfejlesztés.** Budapest. : Nemzeti Tankönyvkiadó, 2000. 98 p.

Dr. Attila Schlögl azokat a módszereket gyűjtötte össze az ókortól napjainkig, melyeket az emberiség hagyományosan használ a memória fejlesztésére.

**Dr. Paul E. Dennison, Gail E. Dennison: Észkapcsoló agytorna** Budapest : Agykontroll GMK., 1991. 41 p.

Tudjuk, hogy a testünk az agy irányításával mozog. Bármilyen meglepő, de minden fordítva is működik: néhány célzott tornagyakorlat megnyitja agyunkat az új ismeretek befogadására. Azért is kedvencünk ez a könyv, mert a Memory XL project magyarországi találkozóján számos testgyakorlatot ténylegesen is kipróbáltunk.

## in Italian

**Autobiographical Methodologies in Adult Education, Andrea Ciantar, CIAPE, Centro Italiano per l'Apprendimento Permanente** - This e-book describes the importance of autobiographical methodologies in learning processes and active citizenship.

<http://www.slideshare.net/andreaciantar9/am-ebook>

**D. Demetrio, Raccontarsi, Raffaello Cortina, 1996.** One of the best manuals on autobiography, translated in many languages.



**Il gioco della vita. Kit autobiografico. Trenta proposte per il piacere di raccontarsi,** D. Demetrio, Guerini e Associati, 1999 – Try out and enjoy narrative autobiography.

**La memoria degli anziani. Una guida per mantenerla in efficienza,** Elena Cavallini, Guido Amoretti, Erickson, 2004 - How memory in older people functions and a series of exercises, strategies and tips to improve its effectiveness.

**L'educatore autobiografo,** D. Demetrio, Unicopli, Milano, 1999.

How to use autobiographical methods in social work and education.

**Perdita progressiva della memoria. Come conviverci,** Sandy Burgener, Prudence Twig, Centro Studi Erickson, 2008 - Our life style and our daily diet can help us prevent or diminish the risk of degenerative illnesses of our mind.

**Scritture Erranti,** D. Demetrio, A. Ciantar, Edup, Roma, 2002.

An interview by Andrea Ciantar - a European expert on autobiography, exploring the social and educational meanings of this practice with Duccio Demetrio.

Slide presentation: <http://www.slideshare.net/memoryxl/autobiographical-memory>

**Sull'autobiografia contemporanea,** Maria Anna Mariani, Carocci, Roma, 2011

The authors takes inspiration from some popular autobiographies of 1900 to explore this literary genre and understand the mechanisms used by our memory to organize the story.

in Polish

**Machina metafor. Historia pamieci** (2009) - Douwe Draaisma. Machina metafor, ksiazka tlumaczona na wiele jezykow i znana w swiecie, nalezy do jego glownych osiagniec + Fabryka nostalgii; Księga zapominania; Dlaczego życie płynie szybciej gdy się starzejemy

**Psychologia pamięci. Badania, teorie, zastosowania** - Maria Jagodzińska. "The Psychology of Memory" is an academic textbook with an encyclopaedia of knowledge about memory.

**Jak usprawnić pamięć** (How to improve memory) - Jerzy Vetulani - Piękno neurobiologii - The beauty of neurobiology.

**Zabawa na tle życia** - Duccio Demetrio. Gra autobiograficzna w edukacji dorosłych. Autobiographical memory with interesting games and exercises.



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## Videos

### in English

**Amazing Brain:** Short video clips on YouTube by Posit Science.

<https://www.youtube.com/watch?v=bMJ0c-j3wYg&feature=related>

**Brainsmart Mini Memory Animation:** (BBC clip to use in the classroom)

<http://www.bbc.co.uk/learningzone/clips/brainsmart-mini-memory-animation-naming-the-planets/10048.html>

Learn how to remember all the planets of the Solar System in order, using a simple memory trick.

**Future Video Learn:** free online courses: <https://www.futurelearn.com/about/how-it-works>

Watch video of how they work.

**How to Develop a Super Memory:** <http://www.videojug.com/film/how-to-develop-a-super-memory>

Tony Buzan talks about overcoming the common problems people have with memory, and how to use your memory power to the full. Also many other short videos on aspects of remembering and learning.

**The Brain that Changes Itself:** <https://www.youtube.com/watch?v=tFbm3jL7CDI>

Psychiatrist and psychoanalyst, Dr. Norman Doidge talks about neuroplasticity, which is overthrowing the centuries-old notion that the human brain cannot change.

### in German

**Grundlagen der Mnemonik [Teil 01/11]** <https://www.youtube.com/watch?v=MYgJ8yQDrWE>

Faszination Gedächtniskunst.

### in Hungarian

**Donald H.Weiss: Hogyan fejlesszük memóriánkat?**

[http://www.youtube.com/watch?v=xuYU2\\_9x4hE](http://www.youtube.com/watch?v=xuYU2_9x4hE)

Ez a Youtube video tuldonképpen Donald H.Weiss: Hogyan fejlesszük memóriánkat? című könyvének vakok, gyengénlátók számára is jól használható hangoskönyv adaptációja.



## Websites

in English

**Academic Tips:** <http://www.academictips.org/memory/index.html>

This features memory techniques from instructors from around the world. The materials can be freely copied, printed, circulated and reproduced for educational purposes.

**Brain HQ:** <http://www.brainhq.com/brain-resources>

Resources to learn more about how your brain works, brain facts and some other things you can do to keep it in shape.

**Build Your Memory:** <http://www.buildyourmemory.com> - A mnemonic resource.

**Center for Digital Storytelling-** Worldwide organization on digital storytelling.

<http://storycenter.org/>

**European Dana Alliance of the Brain:** <http://www.dana.org/>

Every March, EDAB coordinates Brain Awareness Week when hundreds of public events celebrate the progress of brain research.

**Improving Your Memory:** <http://www.memory-key.com/improving>

Covers everyday and advanced strategies, metacognition, mnemonics and lifestyle factors.

**Introduction to Memory Techniques** - <http://www.mindtools.com/memory.html> - The tools to

improve memory, both to remember facts accurately and to remember the structure of information.

**Memory improvement tips** - <http://www.memory-improvement-tips.com/> - Some simple ways how you can improve your memory and develop memory skills.

**How Human Memory Works** - <http://science.howstuffworks.com/life/inside-the-mind/human-brain/human-memory.htm> - A basic overview of how memory works and how ageing may affect ability to remember.

**SharpBrains: Top 50 Brain Teasers and Games:** <http://sharpbrains.com/brainteasers/brain-games-and-teasers-top-50/> - A selection of enlightening brain teasers for adults of all ages.

**Skeptic's Dictionary:** <http://skepdic.com/memory>

Nine pages with explanations of memory concepts, such as implicit memory, forgetting and how memory works, with links to books, blogs and further web links.



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**Story Circle Network** - A blog of women telling their stories -

<http://www.storycircle.org/index.php>

**The Memory Page:** <http://www.thememorypage.net>

Dedicated to brain power, memory improvement and cognitive function.

**in German**

<http://dasgehirn.info/denken/gedaechtnis/>

Diese Website enthält viele Informationen über unser Gehirn mit verschiedenen Unterseiten, die sich mit Wahrnehmung, Denken, Handeln und Entdecken beschäftigen . Auf dieser Seite gibt es Aktuelles und eine Mediathek mit Video - und Audio-Beiträgen.

**in Greek**

**27 τρόποι με τους οποίους ο εγκέφαλός μας διαστρεβλώνει την πραγματικότητα** (27 ways by which our encephalos distorts reality - [www.fightstress.gr](http://www.fightstress.gr) – [fightstress.wordpress.com](http://fightstress.wordpress.com)

**Οι αναμνήσεις αντανακλούν την κουλτούρα μας** - Our culture is reflected in our memories

<http://psychografimata.com/3299/i-anamnisis-antanakloun-tin-koultoura-mas/>

**Όσοι θυμούνται μόνο τις καλές στιγμές είναι πιο ευτυχισμένοι** - Those who remember only the good moments are happier - <http://psychografimata.com/2614/osi-thimounte-mono-tis-kales-stigmes-ine-pio-eftichismeni/>

**in Hungarian**

**Agykontroll – tippek a hatékony tanuláshoz:** <http://www.agykontroll.hu/tanulas-es-memoria>

A Silva-féle agykontroll módszernek Magyarországon is lelkes követői vannak. A módszer complex megközelítést dolgozott ki a memória fejlesztésére, a tanulás hatékonyságának javítására. Ezen az oldalon hasznos, közérthető, hétköznapi tanácsokat találhatunk.

**in Italian**

**Archivio Diaristico Nazionale**

A public archive which contains diaries, letters, autobiographical memories, the writings of ordinary people in which is reflected, in various forms, all of life and history of Italy.

<http://www.archiviodiari.org/index.php/home.html>



**Libera Università dell’Autobiografia**

The main Italian community of practice and training centre for autobiographical work

<http://www.lua.it/>

**Other European projects**

**SOCIABLE** - [ec.europa.eu](http://ec.europa.eu) Information Society Exercising mental functions aged 60 plus.

**INNOVAGE** - [www.innovage-project.eu/](http://www.innovage-project.eu/) How to enjoy quality life in the Third Age.



## Appendix: Sources, presentations and summaries drawn from the Project’s work

32 power-point presentations, papers, videos, illustrations, summaries, examples, and collections of data have been selected for the Appendix and made accessible through:

<http://tinyurl.com/mhguwlq>

[www.memoryxl.blogspot.com](http://www.memoryxl.blogspot.com)

They are cross-referenced throughout the Project Handbook and are integral to it. They are made available to the reader not just as illustration but because some of the material is useful in itself as learning and/or teaching support; some of it will be useful for those considering investigations and exercises of their own; and some of it takes further topics raised in the Handbook.

Do look at the Appendix. You have only seen half of the Handbook if you do not.

List of material in the Appendix:

- 1a. Personal strategies to support Memory: data from national groups
- 1b. Cultural knowledge about Memory: data from national groups
2. Mnemonic methods: Examples from national groups
3. Autobiographical Memory: Examples from national groups
- 4a Attitudes: Examples from national Groups
5. BLANK TEMPLATES for local activities
6. Reports on Project International Discussion groups
7. Polish presentation: What is Memory?
8. Greek summary of Project responses on Cultural Knowledge
9. Italian presentation on Private Methods and Cultural Knowledge



10. Video clip: Italian “ Pubblicità divertente memoria de elefante
11. Video clip: “ Forgetfulness”. Billy Collins. Animated Poetry
12. Polish presentation: Private Methods and Cultural Knowledge
13. Video clip: Polish “The Forgotten Melody ” (1938)
14. Hungarian presentation: Private Methods
15. Art and Memory – illustration
16. UK presentation and workshop: Mnemonic Techniques
17. Mindmap: Memory in Later Life
18. Mindmap: Europe
19. Example of content of national group meeting UK
20. Greek presentation on Senses and the Memory
21. Italian Project Summary of responses: What do I do in relation to Memory?
22. Italian presentation on Autobiographical Memory
23. Italian presentation on Autobiographical Methodologies
24. Italian paper on Autobiographical Methodologies
25. Polish summary of Project Responses on Attitudes to Memory
26. Greek paper on Aesthetic experience as tool for learning and memory
27. Hungarian Summary of Project Outcomes: (Part 1)
28. Hungarian Summary of Project Outcomes: (Part 2)
29. Summary of Talks at Lancaster Conference, June 2014
30. The Mystery of Memory, Lancaster Conference, June 2014
31. Staying in the Driving Seat. Lancaster Conference, June 2014
32. Greek paper on Senses and the Memory



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**“Memory in Later Life: learning – supporting – developing”**

**Memory XL Project**

**2012 – 2014**

