



LearnersMot2

Creating a supportive learning environment for low-educated and low-skilled adult learners over 45

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DEEP IN LITERACY

BLENDDED COURSE ON FUNCTIONAL LITERACY IN ROUTINE SITUATIONS AND EDUCATION FOR BETTERING BASIC SKILLS

English

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DEEP IN LITERACY

A BLENDED COURSE ON FUNCTIONAL LITERACY IN ROUTINE
SITUATIONS AND EDUCATION FOR BETTERING BASIC SKILLS



Deep In Literacy

A blended course on functional literacy in routine situations and education for better basic skills.

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INTRODUCTION

Functional illiteracy is a by-product of societal and technological progress. It is a widespread phenomenon in knowledge society where a tertiary education is a kind of entrance ticket to working, living and continuous autonomous learning. This blended course is an integral part of the project LearnersMot 2, a continuation of LearnersMot both devised and conducted within Erasmus+ Programme.

This blended course invites you to multimodal or combined learning in the field of functional literacy. You will be able to learn from 6 modules containing theoretical texts, videos, face-to-face practical activities and interactive activities based on digital methods. The six modules encompass concepts related to social, work and cultural areas of life (Modules 2, 3 and 4). Module 1 will introduce you to the topic of motivation, module 5 to numeracy and module 6 to the digitalisation and digital methods in older adult education.

Connected to the theoretical concepts *practical activities referring either to the topic of the module and/or related routine situations* have been developed accompanying each module. They are to be used by both adult educators and older learners.

Adult educators will be able to use the practical activities as learning material for their learners. Moreover, they will have to be highly imaginative, meeting the needs of their learners and the experiential knowledge they possess. The low educated and the low skilled older learners keep checking if the knowledge they get in the course is connected with what they already know. You may say that all adult learners do the same, and you might be right, but most learners will stay in education even though the imparted knowledge does not directly touch upon their lives and does not meet their current needs. Contrary to them, the low educated will reject not only the programme, the educator's efforts but learning in general and would quit as soon as possible. Therefore, your responsibility as adult educator working with low educated learners is great, impacting not only learning but also the lives of those who are functionally illiterate.



This blended course primarily targets adult educators, helping them to understand the complex phenomenon of functional (il)literacy and its concepts. It helps them to identify learners who are functionally illiterate and their hiding strategies. Finally, it helps them to build and improve their learners' basic skills (reading, writing, cognitive, cultural, numeracy and digital skills). On top of that, adult educators should take care of triggering primary motivation for learning in the low educated and low skilled learners. They should motivate them to enrol and what is more, remain in education.

Dušana Findeisen



MODULE 1. IF I CAN DO IT, YOU CAN DO IT

Motivating low educated and low skilled learners in non-formal education

DURATION: 90'

EQUIPMENT: Personal computer or laptop or smart phone, Internet connection

INTRODUCTION

Your learners are in a state of functional illiteracy. Luckily a state is never final although it has taken a long time for some low educated and low skilled people to land in a state of functional illiteracy. They feel guilty for not having attained more, they are afraid that bad memories and feelings would come back, they are afraid of changes. What they do not know is that going to school is not the same as attending a course. Educators have to calm them down, encourage them, motivate them for learning and above all, motivate them to stay in education.

MODULE IN A NUTSHELL

The module consists of three units as follows.

Unit 1. Let's have an insight into some theories on motivation and learning

David Kolb's experiential learning theory

The self-determination theory by Edward Ryan and Richard Deci

Theory of multiple intelligences by Howard Gardner

Unit 2. Further reading and checking understanding

Unit 3. Let's make it real and practical

Icebreaking activities

Activity 1. What motivates me and demotivates me?

Activity 2. What benefits can I derive from learning?

Activity 3. How do I like to learn?

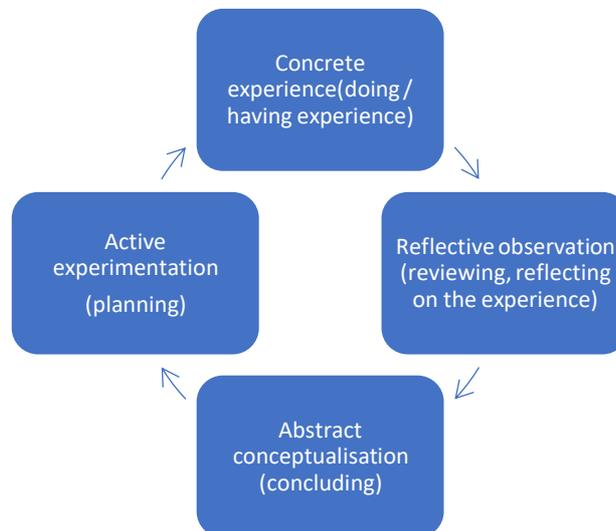


UNIT 1. LET’S HAVE AN INSIGHT INTO SOME THEORIES ON MOTIVATION AND LEARNING

DAVID KOLB'S EXPERIENTIAL LEARNING THEORY

What is learning? According to David Kolb (1984), learning is connected with the change of behaviour. New experiences modify the previous ones. Learning occurs in a specific situation, here and now. Therefore, it is important that your learners are exposed to valuable experiences.

A learning process creates a cycle in which an experience and its analysis play a key role (Kolb, 1984). Kolb describes a learning process as a four-stage cycle. This process usually starts with a specific experience, which is then analysed from different perspectives, reflected upon in order to draw conclusions, create generalizations, even theories and a logical whole at a later stage. At the end of this process, a learner’s behaviour changes. The learners have changed their thinking, feeling and doing. And they undertake practical actions and plans to use the reflections from the previous step:



Now, compare your own knowledge you have with the knowledge you are acquiring while learning; observe, reflect, assess critically, and most of all, translate the knowledge into practice. Make your learners think about the past, how they acted,



what they thought and what they think now they should have done differently in their personal or social life.

THE SELF-DETERMINATION THEORY BY EDWARD RYAN AND RICHARD DECI (1985)

The theory answers the question: what makes us motivated? The following components are important:

Competence - in order to be motivated to do something, you have to be able to do it. It refers to our belief that we can perform certain actions, that we can deal with them.

Autonomy - we like having the freedom to choose, we like deciding what we will do and *how*.

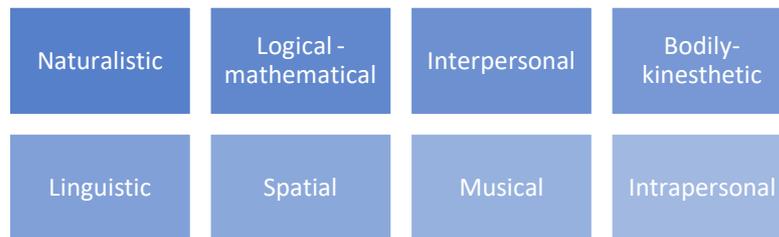
Relatedness - when we do something, we need to know what the purpose of our action is and why it is important.

Self-motivation - it is important to believe that you are confident about your effectiveness and the development of your skills.

THEORY OF MULTIPLE INTELLIGENCES BY HOWARD GARDNER

Howard Gardner is the author of the theory of multiple intelligences. He believes that intelligences are always the result of mutual interactions between biological inclinations and learning opportunities that exist in a given culture (Gardner, 2006). Every person has a different intellectual potential and a different intelligence profile - some intelligences are more developed, and some are less. Certain types of intelligence are related to the mechanism of receiving and processing information - learning preferences are related to the dominant intelligence. It is important for educators, especially those of the low educated learners, to observe the type of intelligence in their learners, to choose contexts and activities that will be rewarding for them.

Eight Types of Intelligence by Gardner:



Naturalistic intelligence is connected with the ability to understand the laws of nature and acting in compliance with them. Have plants around you and access to fresh air while you learn. Look for comparisons between nature and the things you learn.

Logical-mathematical intelligence is connected with the ability to notice logical or number patterns, the ability to reason, and to count. Make sure that content is arranged logically while you learn - use tables, bullet points, processes.

Interpersonal intelligence is the ability to establish relations, communicate and interact with others. Invite someone to learn with you, look for special interest clubs and groups in which you can exchange knowledge and skills.

Bodily-kinesthetic intelligence is connected with manual skills and sports skills; good coordination and dexterity while using different objects. You need movement and expression while you learn.

Linguistic intelligence is connected with sensitivity to sounds, rhythms, the ability to read, write and communicate with words. Read, write, take notes, create rhymes and nursery rhymes while you learn.

Spatial intelligence is the ability to paint, draw and to create pictures, spatial relations and visualizations easily in your mind. Highlight lines with colours, draw diagrams, pictures while you learn.



Musical intelligence is connected with sensitivity to rhythms, sounds, as well as singing, playing an instrument. Listen to podcasts, audiobooks and repeat text aloud while you learn.

Intrapersonal intelligence is the ability to focus on your feelings, draw conclusions from past experiences and plan. (Gardner, 2006).

UNIT 2. FURTHER READING AND CHECKING UNDERSTANDING

- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
- Kolb, D. A. (1984): Experiential learning: Experience as the source of learning and development Englewood Cliffs, New York: Prentice Hall.
- Gardner, H. (2006). Multiple Intelligences: New Horizons in Theory and Practice. New York: Basic Books.
- Kolb's Learning Styles and Experiential Learning Cycle - <https://www.simplypsychology.org/learning-kolb.html>
- Institute for Experiential Learning - <https://experientiallearninginstitute.org/>
- Self-determination Theory - <https://selfdeterminationtheory.org>
- Howard Gardner - <https://www.howardgardner.com/>

CHECKING UNDERSTANDING

1. Kolb described the four stages in the cycle of experiential learning: 1. Concrete experience; 2. Reflective observation; 3. Abstract conceptualisation; 4. Active experimentation.

TRUE FALSE

2. Competence, Autonomy and Relatedness are major components to motivation.

TRUE FALSE



3. According to Howard Gardner there are 8 types of intelligence such as Logical-mathematical, Linguistic and Historical.

TRUE

FALSE

UNIT 3. LET'S MAKE IT REAL AND PRACTICAL

ICEBREAKING ACTIVITIES

Icebreaking activities are connected with the topic of the training. Participants sit on chairs in a circle (there are no tables). There are enough chairs for all but one participant - the one who starts the game (a volunteer).

The participant starts the game by saying: Rise up all those who... e.g., like learning while listening to music, don't like theoretical training, are curious about the world, like reading books, etc. The participants who answer "yes" to a question must get up and change their seat (they cannot choose a seat that is next to their seat). There will always be someone who is standing, his/her task is to say: Rise up all those who... The trainer stops the game after a few rounds. To sum up, participants can be asked how they feel.

ACTIVITY 1. WHAT MOTIVATES ME AND WHAT DEMOTIVATES ME?

This exercise is meant to make learners aware of what motivates or demotivates them to improve their competences.

Participants in groups of 3-4 people write out on large sheets of paper (e.g., flipchart) the factors that motivate and demotivate people with low qualifications to improve their competences and start learning. Then the trainer asks each group to present their results. The educator moderates the discussion asking questions about how to support motivation and how to deal with demotivators (reluctance). To sum up the discussion, the trainer may dwell on the Theory of Self-determination by Ryan and



Deci. A trainer encourages participants to share their conclusions from this exercise
- what and how do they intend to put into practice?

ACTIVITY 2. WHAT BENEFITS CAN I DERIVE FROM LEARNING?

Participants get to know a short life story of a low-skilled person who started learning/gained new competences and was successful in the labour market. The educator selects an appropriate case study so that participants can identify with the person presented. He or she can prepare several life stories so that different stories are analysed by participants in smaller groups. Participants should be asked about their reflections, observations and thoughts after having analysed the life stories.

Next, the trainer invites participants to work in subgroups. Their task is to list the benefits that can be obtained from learning (based on the presented case studies and their own experiences - what they gained when they acquired new knowledge, skills, qualifications). Participants should present their conclusions to the whole group; a trainer can encourage them to discuss and share their thoughts and opinions. At the end, participants work in pairs and share their conclusions drawn from this exercise - what and how they are going to put it into practice?

ACTIVITY 3. HOW DO I LIKE TO LEARN?

This exercise is meant to identify one's own learning preferences with the use of the dominant intelligence type. Firstly, participants may take the test which diagnoses multiple intelligences according to Howard Gardner. Unfortunately, it is a long one. If participants are open, they can share their results with other participants and refer to specific situations from their life, their way of learning.

(<https://www.idrlabs.com/multiple-intelligences/test.php>).

The educator explains the types of multiple intelligences by Gardner (all of them), provides and emphasizes practical tips on how to organize learning, taking into account the dominant type of intelligence.



MODULE 2. DAILY, DAILY WORK

Everyday routine situations in work environment with potential for learning basic skills

DURATION: 120'

EQUIPMENT: Personal computer or laptop or smart phone, Internet connection

INTRODUCTION

In this chapter we will try to raise awareness of the importance of situational learning and workplace learning. The chapter also adds icebreakers and activities that educators can use in their work with adults.

MODULE IN A NUTSHELL

This module consists of several units, a theoretical and a practical one and the one devoted to checking the understanding of the module.

Unit 1. Are low skilled jobs in service economy really low skilled?

Unit 2. Adult learning in work place

Situational learning

Everyday learning

Unit 3. Checking understanding

Unit 4. Let's make it real and practical

Icebreaker Two truths and a lie

Icebreaker Who is it?

Icebreaker Fun questions

Icebreaker Living library

Activity 1. Learning, reading and writing skills using a list of work instructions (for workers in production)

Activity 2. Learning computer skills for preparing a spreadsheet for a warehouse (for warehouse employees)

Activity 3. Describe your company



UNIT 1. ARE LOW SKILLED JOBS IN SERVICE ECONOMY REALLY LOW SKILLED?

According to Rosemarie Klein and Gerhard Reutter (Profi train, p. 18) work positions have changed tremendously over recent years, and the changes will continue to happen. In the past there was a clear division of work and there used to be low-skilled jobs employing those with low levels of formal education, the low-skilled or unskilled workers. These jobs, however, have become more demanding over time and require employees to constantly learn in order to meet new challenges.

Example: Changing jobs – the case of a caregiver (Profi train, p. 18, all translations by Anja Kamenicki, unless otherwise noted).

“Until a few years ago, the work of a caregiver in a nursery home required low-skills. However, considering skills that a caregiver must have nowadays, this kind of work is by no means low skilled, since the tasks and requirements have become demanding at various levels of this job position.”

Areas of skills development education and training derive from actual requirements in specific work environments.

Service economy is much more demanding than industrial economy. Given the fact that it deals with most various needs service consumers have and the diversity of these consumers, service economy leads to more workers in a state of functional illiteracy.

UNIT 2. ADULT LEARNING IN THE WORKPLACE

SITUATIONAL LEARNING

Education and training for skills development in the work environment are best when based on a situational learning approach. Actions in situations at the work are at the core of the situational learning theory. Learning in the work environment occurs during work or performing tasks. The starting point for learning is real life situations in which skills are

applied. Based on these situations are specific skills and competences that employees need to manage.

The goal of situational learning is that knowledge and skills are not only acquired in specific situations and work context but can also be transferred to solving new problems in other areas of life.

Example	Characteristic	Resources
Understand instructions for operating a tool or a simple device. Understand the instructions for the work to be done.	This is a face-to-face conversation between two persons; gestures and facial expressions can be used. The conversation is conducted directly on-site; important things can be shown.	Capturing the situation; understand important words (here, there, now, first, then, etc.) Use language, gestures and facial expressions to show understanding or incomprehension. Know that questions are allowed. Simple question strategies, supported by facial expressions and gestures.
Ask the supervisor/instructor for explanations. Indicate that the instructions and explanations have been understood.	The employee is in a hierarchically lower position. The employee's speaking rate is low; it can be limited to yes/no, or to show understanding or incomprehension.	

Table 1: SVEB 2016. K1 Understanding direct instructions in the workplace with situational help

Note. Adapted from Go Toolkit Arbeitsplatzorientierte Förderung der Grundkompetenzen: Vol. 2. Deskriptoren (p. 16)

PIAAC research has shown that textual and problem-solving skills are often essential for regular work assignments, followed by the ability to learn. The degree to which we can improve our textual and problem-solving skills also depends on the organization of work. Effective work methods such as autonomy, teamwork, independence, mentoring, circular employment, and the use of new forms of learning increase the



number and quality of learning opportunities, support learning in work environments and contribute effectively to skills development (OECD, 2016a and OECD, 2016b).

The fact that adults who have not completed vocational studies and have no qualifications to participate in adult education is worrying. The reasons for this are various:

- 30,7% say they see no benefit in education,
- 28,9% say that their workload/time does not allow them to do so,
- 24,9% say that they are insufficiently informed or that they do not receive adequate offers, and
- 12,7% say that they do not attend training due to high costs.

We are assuming that the majority of the collected answers reflect the respondents' fear of unpleasant emotions they experienced in the times of their schooling.

The Slovenian Institute of Adult Education has been monitoring participation in lifelong learning. A number of research studies have shown that low educated and low qualified adults participate in programmes and activities to a lesser extent than the more educated and skilled ones (inclusion in adult education is also influenced by age, formal education, employment, health status, as well as gender). Despite these results, more than half of the respondents have declared that workplace is a suitable context for learning.

Appleby and Barton (2008) argue that learning has three characteristics:

- a) Learning is a cognitive or mental process involving thinking.
- b) It is an emotional process involving emotions.
- c) It is also a social process that involves action.

Situational learning pedagogy is based on the following tasks imposed on both programme developers and educators:

- (1) Explore routine tasks;
- (2) Consider the learner's life;
- (3) Encourage participatory learning by using authentic materials from a real life work environment;



- (4) Make sure your learners learn in a safe and well supported environment;
- (5) Expand learning to other forms, which means that it will include oral, visual, individual, and group communicative methods.

The situational learning approach in training and education for skills development employs learning resources related to real life work situations.

As a rule, educators should always encourage participants to bring with them resources from their work environment, such as forms, calculations, and tasks that they want to use as examples for learning. These resources should include a wide range of learning preferences, such as visual (mind maps, videos, photographs), auditory (videos, sound recordings, discussion), and kinaesthetic (role-playing, concrete resources).

EVERYDAY LEARNING

How adults learn – everyday situations: <https://www.youtube.com/watch?v=3LdEwYDDJBg>



Daily activities impact all of us as they constantly make us learn informally. Our social network shapes our learning, and we need to be aware of this when we think about our own learning or plan learning experiences for others.

Advice: Tips on how to learn at work (this exercise is meant for adult educators only and it should be considerably modified to meet the needs of the workers in situation of functional illiteracy): <https://www.youtube.com/watch?v=SUO1Tn7pDfw>



UNIT 3. FURTHER READING AND CHECKING UNDERSTANDING

Klein, R., Reutter, G. 2020. Profi Train- Self Study manual. Acquiring Competencies for Work – Based Basic Skills Training. Available on 23. 5. 2021:

http://www.profi-train.de/images/IO1_EN_final_version.pdf

CHECKING UNDERSTANDING

1. Areas of skills development education and training derive from actual requirements in specific work environments.
TRUE FALSE
2. PIAAC research shows that knowledge of mathematical formulas is essential for the needs of the workplace.
TRUE FALSE
3. As a rule, educators should always encourage participants to bring with them resources from their work environment, such as forms, calculations, and tasks that they want to use as examples for learning.
TRUE FALSE

UNIT 4. LET'S MAKE IT REAL AND PRACTICAL

The learning session is started by an icebreaker to create a safe and relaxed learning environment.

ICEBREAKER: TWO TRUTHS AND A LIE

Two truths and a Lie is one of the more traditional ice breakers on the list and can be used anywhere from family parties to company events. To play, you simply ask each person to brainstorm three "facts" about themselves – two of the facts will be true, and one will be a lie.



For instance, you might say: "I once auditioned for the Zoom TV show. I have three brothers. I ziplined in Switzerland some years ago."

Co-workers take turns guessing which of the statements is a lie. (FYI, I have two brothers, not three, so that is a lie. Unfortunately, I did audition for the Zoom TV show.)

Two Truths and a Lie is a fun and engaging game, and more importantly, it can help your team learn facts about one another, so they can form deeper bonds.

ICEBREAKER: WHO IS IT?

Have everyone write a unique, strange, or unexpected fact about themselves on a piece of paper. Then, put the pieces of paper into a hat and mix them around. Pull each of them from the hat and read each fact.

Allow the team to try and guess who wrote it. Following that, ask the employees who wrote the fact to identify themselves and explain the context further if necessary. This could be a great way to get to know surprising new things about the team mates.

ICEBREAKER: FUN QUESTIONS

Asking funny questions is an easy and effective ice breaker game. To play, simply go around the room and have each person provide an answer to a fun question. The questions are up to you, but if you are stuck, here are a few ideas:

- If you are stranded on a desert island and have the option of bringing three items with you, which three items would those be and why?
- If you were an animal, what would you be and why?
- Have you ever been to a concert? If yes, tell us about it.
- If you could have any celebrity over for dinner, who would it be and why?

These questions serve two purposes – first, they allow the learners to get into a sillier, more creative mindset, and second, they encourage conversation on topics typically reserved for outside the job, which enables the learners to get to know one another on a deeper level.



ICEBREAKER: LIVING LIBRARY

Living Library is a method of non-formal education, and it encourages social awareness, tolerance, and respect for human rights. It consists of living books, librarians, and readers.

In our case, adult educators are the librarians, and the learners are the living books and readers. Every learner writes the title and some topics of the book called “Me and my job.” The librarian helps the learners by asking them questions and giving them examples. After all the books are written, the librarian divides the group in two parts. The first part (the living books) – put the titles of their books on the table that serves as a library bookshelf. The second part of learners (the readers) – choose one title of the book from the bookshelf; the one that they like and that persuades them the most. Then the process of reading begins. This process involves sincere conversation between the living book and the reader, asking concerning questions and getting straight answers. The reading process becomes a comfortable and interactive place for intimate communication with people from socially vulnerable groups. Librarians – adult educators, and teachers are observing conversation from outside and intervene if needed. The reading session is approximately 15 to 25 minutes long. The result of reading is usually obvious: the reader leaves thoughtful, positive, and energized, quite often they become friends or exchange contacts. The process of reading demolishes the barrier of uncertainty and fear, develops tolerance and mutual understanding. After the reading is finished, the groups alternate – readers become living books and the group of living books become readers. The process of reading repeats once again.

You can also watch video Teaching adult learners: Icebreakers

https://www.youtube.com/watch?v=nqeKgUSwN_8

ACTIVITY 1. LEARNING, READING AND WRITING SKILLS USING A LIST OF WORK INSTRUCTIONS (FOR WORKERS IN PRODUCTION)

Participants are asked to bring various lists of instructions they must follow in the workplace. With the exercise of reading instructions, summarizing, and analysing them, and with the exercise of writing instructions for another process, the participants:



- practice reading different types of popular texts of documents,
- read and understand,
- understand basic information and can summarize its content,
- connect the information from the text with their own knowledge,
- learn to structure a text using temporal and sequence markers (first, next, finally etc.)
- know how to create simple texts about processes with content from everyday life, and
- observe the spelling and grammar rules of the written language.

ACTIVITY 2. LEARNING COMPUTER SKILLS FOR PREPARING A SPREADSHEET FOR A WAREHOUSE (FOR WAREHOUSE EMPLOYEES)

Participants learn to use the Excel data editing programme based on a spreadsheet they use to record inventory when/if working in a warehouse.

ACTIVITY 3. DESCRIBE YOUR COMPANY

Describe your company and draw its organisational chart. Introduce your company and your organisation to your colleagues using expressions like

“I am going to introduce you to my company.”

“My company is divided into XY departments.”

“These departments are ...”

“I work in the department XY.”

“I am responsible for ...”



MODULE 3. WHAT A SMALL WORLD!

Everyday routine situations in social environments with potential for learning basic skills

DURATION: 120'

EQUIPMENT: Personal computer or laptop or smart phone, internet connection.

INTRODUCTION

Each day people enter their familiar social environment. They step into their routine situations where they behave - think, speak, read, write - in a given way. They also read texts differently and use their mathematical abilities according to single, mostly safe routine social situations in which they learn and apply their basic skills: reading, understanding, speaking, cultural skills, in short, basic literacy and numeracy skills.

MODULE IN A NUTSHELL

The module consists of three units as follows.

Unit 1. About defining social environment and routine social situations

Unit 2. Further reading and checking understanding

Unit 3. Let's make it real and practical

Icebreaking activities

Activity 1. Spending time together with your partner

Activity 2. What have you done today / what will you be doing?

Activity 3. Spending time together / helping each other



UNIT 1. ABOUT DEFINING SOCIAL ENVIRONMENT AND ROUTINE SOCIAL SITUATIONS

It has been generally admitted that how people behave and develop is dependent on their health and on *the psychosocial environment* in which they live and move. Social environments shape behaviour directly through various forms of influence such as peer pressure and social learning.

Knowing that adults in a situation of functional illiteracy have difficulties accepting change or adjusting to new situations, educators try to (re)create a *safe environment* for them within the learning group and situations they choose. Situations are routine, familiar and often repeated. We assume that when people in the situation of functional illiteracy find themselves in routine situations in their personal and social life, they are more eager to strengthen some skills or learn new ones. The educators' task is to observe their attitude and responses and to adjust their "teaching" to each of them and to the group of learners. They are supposed to give to these situations a wider and deeper cultural dimension.

To better understand social situations with learning potential adult educators are supposed to have a clear idea about *what is the social environment* of their learners. We assume that people in a situation of functional illiteracy rather depend on their immediate surroundings. People's immediate social environment are *family and friends*. There they get support for healthy eating and get complimented on their eating and other habits and activities by children, parents, family, partners. They get support for their *physical activity* when the others participate in their physical activity with them or, on the contrary, their physical activity can be sabotaged.

'Social environment' is a social construct that has different dimensions but for our purposes it is important to downsize their number to what can help us, determining *social contexts* and *situations with learning potential*. These situations will be reflected in the Practical Approach Unit.



Social environment and social situations depend on the *social contexts* as you will see in the film *Easy German*. The more people are educated, the more they are surrounded (in urbanized social environments, leisure time environments, professional environments), the more they can be active and engaged, the more their lives can be interconnected with the lives of other people, and the more diverse are their social situations. It is understandable that people in situation of functional illiteracy are exposed to or initiate a lesser number of diverse situations.

Both social environment and social situations depend on *social cohesion* of the environment, *trust* and *propensity on collective action*. People in situation of functional illiteracy mostly depend on their community and appreciate when it is *closely knit*. When adults watch out for children and children can look up to adults, if people can be trusted, *if they generally get along with each other*, if residents of the community are willing to help each other and when they share the same values, they appreciate social capital in their community. They feel like belonging to the community if they can visit their friends in their homes. If they need advice, they like being able to go to someone in their neighbourhood... *Sometimes they are willing to work on something to improve their neighbourhood*. They like to think of themselves as similar to the people in their neighbourhood. They think that it is good to agree with people around them about something that is important in their life.

Social capital is of great importance. From their neighbourhood according to Kaplan et al. (2003) people expect *social support* which is *instrumental, informational, appraisal and emotional*.

We believe that adult educators should encourage *social support* within their group of learners. Members of the groups of learners should readily be helped by other group members and the educator as to carry out some tasks. They should share knowledge and skills. They expect *to be praised* (very important!) and they hope *to get emotional support*. “Mohamed is so good, but you do not say how good he is?” “If you were not like a mother to us I would have fled away.” said M.B. (24)



Adult educators will learn about their social environment from their learners, but it is important for them to have some theoretical background, to have in mind an array of dimensions concerning living in neighbourhoods or in community. This kind of knowledge will help them to constitute their own list of situations, to include in their own emerging manual based on their own findings. The draft we are offering within this project should serve only as orientation for adult educators. We have set up a tentative list of dimensions of social environment based on assumed social contexts and social situations.

Social situations

Sharing daily, routine situations with partner, children, family, friends

Helping each other

Visiting friends in their homes

Searching for advice

Working together at improving neighbourhood

Being active in family routine situations; preparing meals, etc.

Going shopping, etc.

Changing habits with the help of others

Addressing health problems

UNIT 2. FURTHER READING AND CHECKING UNDERSTANDING

- Coleman, J. S. Social capital in the creation of human capital. *Am J Socio* 1988: S95–S120. 51.
- Edwards, B., Foley, M. W. Civil society and social capital beyond Putnam. *Am Behav Sci Scientist* 1988; 42: 124–139.
- Kawachi, I. Social capital and community effects on population and individual health. *Ann N Y Acad Sci* 1999; 896: 120–130.
- Veenstra, G., Luginaah, I., Wakefield, S., Birch, S., Eyles, J., Elliott, S. Who you know, where you live: social capital, neighbourhood and health. *Soc Sci Med* 2005; 60: 2799–2818.



- Terri Combs-Orme Early Brain Development for Social Work Practice: Integrating Neuroscience with Piaget's Theory of Cognitive Development, Journal of Human Behaviour in the Social Environment, 2013; 23:5, 640-647,

CHECKING UNDERSTANDING

1. People in situation of functional illiteracy like living independently.

TRUE FALSE

2. They expect their environment will offer them all sorts of support.

TRUE FALSE

3. They need to be praised as often as possible.

TRUE FALSE

UNIT 3. LET'S MAKE IT REAL AND PRACTICAL

Adult educators will have to be imaginative to recreate social situations for pedagogical reasons or to exploit the random situations in the environment.

ICEBREAKING ACTIVITIES

Icebreaking activities can be used for each session but particularly as an introduction to the first one as they are an important helper on the way towards building *a learning and living community* and creating *the sense of belonging and feeling accepted*.

If learners do not know each other, they could adopt a new socially valorisation identity (described in LearnersMot 1, Deep In: <http://www.learnersmot.eu/online-course-start.php>,

Lesson 3. From listening and speaking to writing. About basic skills, under Activities: 3.2 Activity 2, From ice-breaking activities towards real-life written practice - filling in forms)

If learners already know each other, then the Random Picking up Wheel might be an activity of choice, particularly because it can be used digitally.

Random picker wheel: <https://tools-unite.com/tools/random-picker-wheel>

ACTIVITY 1. SPENDING TIME TOGETHER WITH YOUR PARTNER

A funny approach to everyday routine situations with one's partner.

A day in the life of Dennis Cook: <https://vimeo.com/49270861>

The film is used for learning English where daily routine is an important introduction to personal activities... It would be boring to watch the film in one go. So, the films should be divided into several parts as many as you find right. They will be used as a trigger for conversation about learners' own everyday lives.

- (1) Your learners can memorize collectively Denis Cook's situations using the markers of sequence: firstly, secondly, thirdly then, finally he...
- (2) Learners act out these routine situations... taking on the role of Denis and the role of Tricia.

The narrations should not be restricted only to what your learners do but also on how they feel about these routine situations. How they lived transiting from primary to secondary socialization, going away from home and living alone, setting up one's own family, taking on a first job, etc.

This activity should lead to writing short notes to each other.

Dear James,
I hope you are fine.
You would like to know about how I spend my days. Well,
Firstly, I get up at....
Then I take a shower



Finally,

Say hello to your wife and children

Kind regards,

Peter

Alternatively, they could write to their partner how they felt...

Darling, (pussy cat, my mousey, etc. Make it as funny as possible!)

I had to get up early as you know. At...

I felt really tired (annoyed, exhausted, fed up)

Then

Finally

Love

Peter

ACTIVITY 2. WHAT HAVE YOU DONE TODAY / WHAT WILL YOU BE DOING?

What's your daily routine? | Super Easy German:

<https://www.youtube.com/watch?v=FOCFFJLQUcM&t=9s>

ACTIVITY 3. SPENDING TIME TOGETHER / HELPING EACH OTHER

**egg
boil
timer**



This is another routine situation for some people. Digital approach is being used as well as an important skill of reading instructions.



Before using this digital approach ask your learners if they boil eggs from time to time, how they like their eggs, liquid, soft liquid, soft, semi hard, hard. How do they go about it?

Learners are usually very precise about the process and describe it very accurately. Problems arise when they are asked why.... And how...

Egg count down boil timer is a reading exercise but it could end up in writing learners dictating each other the instructions. First, second, third.... then emphasis is on process and writing a short note.

Boiling eggs together, using an egg boil timer: <https://tools-unite.com/tools/boiled-eggs-timer>



MODULE 4. CULTURE IS WITHIN EASY REACH

**Situations with potential for learning basic skills in a cultural environment
and creating bonds with it**

DURATION: 120'

EQUIPMENT: Computer and projector, whiteboard, paper sheets and pens

INTRODUCTION

The main objective of this module is to improve self-confidence and self-esteem in low educated and low skilled learners by means of culture (arts, etc.). Cultural skills help improving all other basic skills like reading, writing, understanding, communicating and numeracy skills.

MODULE IN A NUTSHELL

The module consists of three units as follows.

Unit 1. Let's get a wider picture

Unit 2. Further reading and checking understanding

Unit 3. Let's make it real and practical

Icebreaker Rather than

Activity 1. The life of an important historical figure in your city

Activity 2. What's the price of the lunch?



UNIT 1. LET'S GET A WIDER PICTURE

If asked to describe your culture, what would you say? Spanish people would probably mention flamenco, bullfighting, “Don Quijote” or paella. History, literature, gastronomy, beliefs, norms, values express our culture. Cultures are sets of patterns of human activity within society or social group. Culture is how we think, act and behave. It is how we understand symbols, from language to gestures. Culture is everywhere, and we continually develop and define our culture.

Culture defines us as individuals and members of collectives. It plays crucial role in our social lives. It is important in shaping social relationships, social order, our everyday activities, etc.

According to social scientists, culture is composed of two fundamental categories: material and non-material culture.

Material culture consists of physical things produced and used by society. This aspect includes a great variety of things, from clothing to films, music, literature, arts, monuments, paintings, etc.

Sociologists define the *non-material* culture as values and beliefs, language, communication, and practices that are shared by a group of people. Culture is made up of knowledge, assumptions and expectations. It also includes rules, laws and morals that govern society; the words and symbols we use to express ideas and concepts. Culture is also what we do and how we behave and perform (for example, theatre and dance). It is encapsulated in how we behave or interact with others, how we express identities of race, class and gender. Culture also includes the collective practices and ceremonies we participate in. Material culture (product) and non-material culture (process) are often connected.

As culture is an inseparable aspect of our lives, we can use it as a tool for adult education.

The arts and humanities foster critical thinking, and they help learners find their path to knowledge using culture as a learning method. Art can also serve as a powerful tool for social inclusion while working with immigrants, minorities and other vulnerable groups. Museums, galleries, libraries and other cultural institutions offer significant opportunities for informal



adult learning. Museums are one of the most important environments for intergenerational learning. Many adults initially come to museums with their children.

Adult learners' basic communication skills, their creative and critical thinking can be improved by discussing their experiences and feelings connected with a visit to museums or attending a theatre performance. If we are learning in a way that engages us emotionally, we are more likely to internalize new knowledge.

Different aspects of culture can be used in teaching various skills, i.e., gastronomy and cooking are culture and they can be used for learning cognitive, numeracy and other basic skills. The relation between culture and skills is much closer than it seems. Numeracy and mathematics are present in all recipes (proportions, divisions, multiplications, units, dosage).

Folklore may be used to improve reading, writing and cognitive skills. It can help enriching vocabulary of the learners. Proverbs and sayings are widely in everyday life belonging to the so-called oral literature. Writing is a cognitively challenging activity that involves translating thoughts into language, organizing ideas in such a way that readers can follow the writer's train of thought and access knowledge.

Elaborating instructions requires taking into consideration characteristics of low educated and low skilled adult learners – they are practical, goal-oriented and want knowledge to be useful in everyday life.

The usage of digital technologies should be encouraged. You can start by creating a group chat for sharing opinions, doubts, etc. Digital technologies may also serve as a tool for improving writing skills due to the auto-correction option.

Summing up, let's use all the tools available in our cultural environment (inside and outside the lecture room) as to make the education process as positive, encouraging and motivating as possible.



UNIT 2. FURTHER READING AND CHECKING UNDERSTANDING

- Bringing Cultural Context and Self-Identity into Education: Brian Lozenski at TEDxUMN. Available on 23. 05. 2021:
<https://www.youtube.com/watch?v=bX9vgD7iTqw>
- Math in the Kitchen. Available on 23. 05. 2021:
<https://www.youtube.com/watch?v=wQkCBhQd7wM>
- EPAL focus: Art and culture in adult education. Available on 23. 05. 2021:
<https://epale.ec.europa.eu/en/blog/epale-focus-art-and-culture-adult-education>
- Quintana, J. I.: Actividades lúdicas para trabajar los coloquialismos, los refranes y los dichos en el aula de ELE, Universidad de Burgos. Available on 23. 05. 2021:
<https://www.educacionyfp.gob.es/dam/jcr:f78f7760-b23c-42e7-b6e6-87b8ffec3522/2006-redele-6-07ibanez-pdf.pdf>
- Types, Elements & Subsets of Culture. Available on 23. 05. 2021:
<https://study.com/academy/lesson/types-elements-subsets-of-culture.html>
- Cole, N. L., So What Is Culture, Exactly? Available on 23. 05. 2021:
<https://www.thoughtco.com/culture-definition-4135409>
- Harper, H., The 10 Best Icebreakers for Adults (Tried & Tested). Available on 23. 05. 2021: <https://www.quizbreaker.com/icebreakers-for-adults>

CHECKING UNDERSTANDING

1. What is culture?
 - a. Culture is how we act, think, and behave.
 - b. Culture is how we understand symbols, from language to gestures.
 - c. Culture consists of values, beliefs, systems of language, communication, and practices that people share in common.
 - d. All the above are correct.
2. Films, music, literature and art are considered as
 - a. Material culture
 - b. Non-material culture

3. Values and beliefs, language, communication are considered:
 - a. Material culture
 - b. Non-material culture

4. Art can serve as a powerful tool for social inclusion while working with immigrants, minorities and other vulnerable groups.
 1. True
 2. False

5. Which of these is not a characteristic of adult learners:
 - a. They are practical and goal-oriented
 - b. They are used to studying and have a very good study discipline.
 - c. They need to use their personal experience as a resource.

UNIT 3. LET'S MAKE IT REAL AND PRACTICAL

ICEBREAKER: RATHER THAN

Target group: new teams

Objective: Get participants to understand each other's preferences.

Participants: 5 to 12 people

Duration: 3 to 8 minutes

Instructions

1. Get everyone to sit in a way so they can all see each other.
2. Start by asking one student to say one thing he likes to do (e.g., I like running).



3. The person on the left restates what the student said and adds something he/she would rather do (e.g., “X” likes running, I would rather go swimming).
4. The next team member then restates what was said, and then adds on what would he/she rather do.
5. The game continues until every person has said the whole list and added on what he/she would rather do.

ACTIVITY 1. THE LIFE OF AN IMPORTANT HISTORICAL FIGURE IN YOUR CITY

Duration: 45 min

Participants: 5 to 12 people

Target group: Adult learners, especially low educated and low skilled adult learners

Objective: Improve reading and writing skills, learn relevant facts about your city

Materials: a projector or TV to show a video, a worksheet (it is provided an example of Antoni Gaudi as worksheet 1 but you can use any important character or other cultural aspect of your learners' *local* environment).

1. Before beginning with the activity, make a short brainstorming with the learners, ask them what they know about Antonio Gaudí (or an important figure or any other cultural aspect of your learners' *local* environment). There are no wrong answers, learners can say anything that comes to their mind. Write down everything they say on the white board/flip chart.
2. Watch a video about Antonio Gaudí: <https://www.youtube.com/watch?v=HNMERLHjV7E>

Ask your learners to discuss in small groups.

- What did you like best, what have you learnt?
- What has caught your attention?



3. Provide the worksheet: *Fact about Gaudí's life* (Worksheet 1 or, alternatively, you can provide a worksheet of an important figure or any other cultural aspect of your learners' *local* environment). Read the text with the whole study group. Facilitate your learners' learning.
4. Ask the learners to work in small groups to answer the questions provided in the worksheet. After that, discuss with the whole group.

Inspiring Activities

- Organise a visit into the urban environment of Reus (or of your learners' *local* environment) connected with Antonio Gaudí (or an important figure or any other cultural aspect of your learners' *local* environment): exhibitions, visiting a local restaurant, attending a theatre or a film performance in connection with the educational programme.
- What else would you like to know about Gaudí (or an important figure or any other cultural aspect)? Search online.

ACTIVITY 2. HOW MUCH DOES IT COST?

Duration: 30 min

Participants: 5 to 12 people, work organisation in small groups

Target group: adult learners, especially low educated and low skilled adult learners

Objective: to practice different arithmetic operations and plan the budget

Materials: worksheets with the price list of the products and recipes (the example is based on Catalanian cuisine, but can be changed to make it more relevant for students)

Introduction to the activity

1. Begin with some general questions to the whole study group:



- What is your favourite dish? Do you like cooking for your family and friends? Why yes/why not?
 - Do you like to cook lunch yourself? Why yes/why not? Do you have a special recipe? Who did you get it from? How important is food in your celebrations?
2. Give a general explanation about the history of the *local* cuisine. Ask your students to bring photos of their dishes, ask them to describe the preparation, etc.

Our national and local cuisine has aspects of history, geography, culture, etc. For example, Catalonia's culinary heritage is rooted in Greek and Roman traditions that give the origin of the key ingredients of the Mediterranean diet: olive oil, wheat and wine. Besides, it also owes a debt to the Moors, who introduced new farming methods and widely used products as rice and aubergines. With the discovery of America, the tomato was introduced to our cuisine.

Tackling down the origin of daily used products, we can explore our land, enrich our general knowledge and even discover the secrets of our national cuisine.

3. Provide flashcards (you can use Worksheet 2) with a list of products from your country and regions where they are produced. Ask your learners to work in pairs or small groups to match the products with the names of the regions. After correcting the activity, you can ask students which of these products they have tried and if they have ever been to the cities or regions listed in the activity. It would be a good idea to look up all the regions on a map.

Instructions for the activity

This activity is about applying mathematics to everyday life. It is very likely that your learners already apply mathematics intuitively while preparing a dish or go shopping to a supermarket. Mathematics are not necessarily abstract.

1. Divide the learners into groups of three and provide each group with the three handouts (you can use worksheets 3, 4 and 5 or prepare something similar).



2. Each group elaborates a menu for lunch and calculates its price taking into account the number of diners.
3. At the end of the activity, each group shares their results – the menu chosen, and the budget needed.

References

Las matemáticas en la cocina desde niños hasta adultos. Available on 23. 05. 2021:
<https://ekuatio.com/las-matematicas-en-la-cocina/>

You can find the rest of the references in the unit 2 of this module.



MODULE 5. COUNT ME IN!

Mathematics as problem solver applied to evidenced routine situations

Do not worry about your difficulties in mathematics, I assure you that mine are greater.

Albert Einstein (1879-1955)

INTRODUCTION

This module is about using mathematics in everyday life situations in low skilled and low educated adults over 45 years of age. Do you know a person who cannot find their way out of situations where adding or subtracting are needed? Does this person hate calculating percentages and does not trust themselves to achieve accurate results? This person may be in situation of functional illiteracy. The person can also be dyslectic, struggling with finding their own ways...

Perhaps an improvement in adults' numeracy skills can be brought about if we first commit ourselves to changing their *attitude* towards mathematics. Educators should *explore their learners' feelings towards the subject. They should identify their phobias and develop strategies to overcome them. The best way to do it is by applying mathematics to real life situations.*

MODULE IN A NUTSHELL

The module contains four units as follows.

Unit 1. Mathematics applied to everyday life and the need to overcome one's fears

Unit 2. Routine situations that require maths skills

Unit 3. Literature and further reading

Unit 4. Solving real life problems using math concepts

Icebreaker Very basic mental addition or subtraction game for two players

Activity 1. The right dosage?

Activity 2. Budget

Activity 3. A 50 € gift VOUCHER



UNIT 1. MATHEMATICS APPLIED TO EVERYDAY LIFE AND HOW TO OVERCOME ONE'S FEARS

It seems to be socially acceptable to be bad at maths. We often hear people say: “Maths is not my thing.” In 2021 in the UK, the governmental statistics suggest that 49 % of the working-age population of England – have the numeracy level that we expect of primary school children. What to do?

In 2001, in UK was launched the “Skills for Life” strategy. 14 million adults were supported over a ten-year period to improve their skills. What lessons can we learn from this experience? Instead of the current performance-oriented environment, attitude-oriented approaches could be introduced as to lower anxiety levels. In turn, skill levels could rise. So, adults should be trained to use maths in everyday situations more often as to become more confident in the use of numbers.

Improving learning participation of adults with low skills: <https://www.oecd-ilibrary.org/sites/07d987ba-en/index.html?itemId=/content/component/07d987ba-en>

One of the most important understandings of mathematics is *proportional reasoning*. Proportional reasoning refers to the ability to use ratios in situations involving comparison of quantities (Doyle, Dias, Kennis, Czarnocha, & Baker, 2016). Additionally, proportional reasoning “is one of the most commonly used applications of mathematics in everyday life” (Hilton, Hilton, Dole, & Goos, 2016, p. 194). Among the skills needed for proportional reasoning are *multiplicative and relational thinking* and an understanding of concepts such as *rational numbers, fractions, decimals, multiplication, and division* (Lamon, 2005). The comprehension of rational numbers and fractions is of special importance since these notions are connected with real world situations (Behr et al., 1983).

Many adults fail to reason proportionally (Lamon, 2007; 2012) but maths is the universal language which is applied in almost every aspect of life. Adult learners would be amazed to see the emerging of maths from different situations.



UNIT 2. ROUTINE SITUATIONS THAT REQUIRE MATHS SKILLS

Making routine budgets

How much should I spend today? When will I be able to buy a new car? How much money is left when I have paid my monthly bills? Should I save more? Such thoughts usually come to our mind. We prepare budgets based on simple calculations with the help of simple mathematical concepts. So, we can't say, I am not going to study maths ever!

Interior designing

Interior designers plan the interiors based on area and volume calculations to calculate and estimate the proper layout of any room or building. Such concepts form an important part of maths.

Shopping at grocery stores and supermarkets

The schemes like 'Flat 50% off', 'Buy one, get one free', etc., are seen in most of the stores. Customers visit the stores, see such schemes, estimate the quantity to be bought, the weight, the price per unit, discount calculations, and finally the total price of the product and buy it. The calculations are done based on basic mathematical concepts. Thus, here also, maths forms an important part of our daily routine.

Time management

An individual wants to carry out several assignments in a limited time. Not only the time management is a problem, some people can't even read the time on an analogue clock. Such problems can be solved only by understanding the basic concepts of maths. Maths not only helps us to understand the management of time but also to assess it.

Planning a trip

We all are bored of our monotonous life and we wish to go on long vacations. For this, we have to plan things accordingly. We need to prepare the budget for the trip, the number of



days, the destinations, hotels, adjusting our other work accordingly, and much more. Here comes in the important role of the maths. Basic mathematical concepts and operations are required to plan and enjoy a successful trip.

Health and medication literacy

Medication literacy is about a person's ability to make decisions about medicines, about their safe and effective use (Raynor, 2009). Health literacy is about understanding basic facts about health and medication information. Patients need some maths applied to health and the use of medications among which the dosing information (frequency, duration, timing), when to take medication with other drugs, instructions to follow if dose is missed, etc.

UNIT 3: FURTHER READING AND CHECKING UNDERSTANDING

- An international forum for research into Adults Learning Mathematics at all levels.
- Available on 23. 5. 2021: <https://alm-online.net/>
- BBC website offering mathematics resources for all ages. Includes a financial literacy section. Available on 23. 5. 2021: <https://www.bbc.co.uk/bitesize/subjects/z6vg9j6>
- Resources and skills practice for all levels. Extensive section called Everyday Math covering many basic number skills. Available on 23. 5. 2021: <http://www.math.com/>
- Includes an Open Resources section allowing free access to resources for teaching.
- Available on 23. 5. 2021: <http://www.atm.org.uk/Maths-Teaching-Resources>
- Extensive list of student resources available online. Includes articles and general interest topics as well as mathematics. Also has a tab labelled "50 Fantastic Resources for New Teachers". Available on 23. 5. 2021:
<http://www.studentguide.org/a-complete-list-of-online-math-resources/>
- Functional Mathematics and Skills for Life resources. Offers links to other websites offering similar material. Available on 23. 5. 2021:
http://www.skillsworkshop.org/useful_links
- 22 Examples of Mathematics in Everyday Life. Available on 23. 5. 2021:
<https://studiousguy.com/examples-of-mathematics/>



CHECKING UNDERSTANDING

1. People with underdeveloped math skills usually work in high-ranking and paid jobs.

TRUE FALSE

2. Low-educated people who have difficulties using math concepts expect help and support from the community to be able to carry out their daily life activities.

TRUE FALSE

3. Using mathematical knowledge does not help in everyday life and work.

TRUE FALSE

4. Educators should explore their adult learners' feelings towards math identifying their phobias and developing strategies to overcome them. How?

- a. The way to do it is by applying mathematics to real life situations.

TRUE FALSE

- b. There is no need to intervene in the adult learners' education to improve math skills.

TRUE FALSE

UNIT 4. SOLVING REAL LIFE PROBLEM USING MATH CONCEPTS

ICEBREAKER: VERY BASIC MENTAL ADDITION OR SUBTRACTION GAME FOR TWO PLAYERS

Target audience: Adult low skilled learners

Materials: A pair of dice



This is a very flexible mental math game which can be used to hone specific mental maths skills. It is ideally suited to one-to-one tutoring or very small groups. It can be used to practice mental addition, subtraction and multiplication and is extremely good for reinforcing time tables.

Variation 1 – Addition

Rules Objective: First player to reach 100 wins

1. Player 1 (learner) starts by rolling two dice. They add the numbers on the dice and write the total down.
2. Player 2 (other learner or tutor) rolls the dice, adds the numbers and writes them down.
3. Player 1 rolls the dice, adds the numbers on the dice and must mentally add this score to their previous total and then write this running total down.
4. The game simply repeats until someone reaches 100.

Variation 2 -Subtraction

Rules Objective: Both players start at 100 and subtract down. The first to reach zero wins.

The rules for this game are exactly the same as Variation 1 except that you subtract the dice score instead of adding it.

ACTIVITY 1. THE RIGHT DOSAGE?

Johanna's child, whose weight is 12 kilograms, is sick and needs an antibiotic. The recommended dose in ml is equivalent to $\frac{1}{4}$ of its weight [in kilos]. How many ml of the antibiotic should Johanna give to her child? Justify your answer.

Expected dialog

Learner: 3 yes, the $\frac{1}{4}$ is the 3.

Teacher: How did you think about it? Why is the $\frac{1}{4}$ equal to the 3?

Learner: Because 3 times 4 is 12. I split the 12 to four pieces. So, she will have 3 ml.

Teacher: Why did you decide to divide it to four pieces?

Learner: Because it says that she wants the $\frac{1}{4}$ of the child's weight

ACTIVITY 2. BUDGET

You have just one income per month, your salary. This month it will amount to 1000 Euros.

How much do you spend on rent, electricity, water, clothing, transport, cell phone, groceries?

How much is left to save or to spend more freely?

Item	Income (Euros)	Outcome	Difference	Savings
salary	1000			
rent		450		
electricity		30		
transport		37		
...				
TOTAL	1000	517	483	?

This activity can be digitized (using Excel sheet).

ACTIVITY 3. A 50 € GIFT VOUCHER

Materials: Collect copies of local Pizza menus – at least one (or one set) per pair of students, or one each depending on how we wish students to operate.

If you won a 50 € gift voucher for a night at the Pizza restaurant, how would you use it?

Expected questions/tasks:

- If you won a 50 € gift voucher, would it be enough to feed your family or a group of close friends?
- What would you buy?
- Are the specials at this restaurant worthwhile?

- Which restaurant would you prefer to go to, and why?
- Compare costs of the meals you would buy in each of them.

This activity can be realized in the traditional way or it can be digitalized.

ACTIVITY 4. TIME MANAGEMENT

If you find that you have difficulties staying on tasks or you can't finish them in due time, make a list of all the tasks you need to accomplish and then choose priorities according to the deadlines and the amount of effort required. Concentrate on completing one task at a time.

List of tasks	Arrange the tasks according to your priorities	Time needed
Waiting for the elevator		
Taking children to the nearby school		
Brushing teeth		
Taking the bus to work		
Having breakfast		
Traveling upstairs		
Taking a shower		
Preparing breakfast		



MODULE 6. LET'S GRASP THEM!

Opportunities for going digital in everyday life

INTRODUCTION

This module is about opportunities for going digital in everyday life for low skilled and low educated adults over 45 years of age. Moreover, at least 5% of all educational activities meant for functionally low literates are to be digitalized so that they might -while learning- gain skills that can be transferred to different areas of their lives. This module is meant to offer low educated and low skilled learners' opportunities for their *technological socialization and digitalized education but they serve as models and educators should modify them to suit local situations.*

MODULE IN A NUTSHELL

The module contains three units as follows.

UNIT 1. All areas of life are getting digitalized and we all need digital skills

UNIT 2. Literature and further reading

UNIT 3. Let's make it real and practical

Activity 1. Create an email account

Activity 2. Compose an email for your school mate

Activity 3. Find a story on YouTube to read it to your son or daughter

Activity 4. How to find online the nearest cash point machine

Activity 5. Find a recipe for a traditional breakfast of another country and get the shopping list with all the ingredients needed



UNIT 1. ALL AREAS OF LIFE ARE GETTING DIGITALIZED AND WE ALL NEED DIGITAL SKILLS

Some social groups still avoid utilizing new technologies to the best of their ability. Older employed adults over 45 years of age are less likely to use new technologies due to the fact that they lack adequate knowledge (Thrive Global, 2019). But it is also true that they are burdened with stereotypes suggesting that technology is reserved for young people, mostly men. Finally, they have not developed the digital skills to the point where they could eventually learn on their own and would be able to ask appropriate questions. To be a user of digital technology, one has to become an autonomous learner which is not the case of the low literates. Yet another obstacle is that they dislike changes and tend to avoid them. They might not understand the “computer language” and are afraid of it... They keep saying: “This is not for me.” Some of them are afraid of losing their identity due to abundant information.

The gap between the digital skills required and the ones the Europeans have is important (All) Europeans need help to acquire digital skills as to have a suitable profile that will help them retain or obtain a job and be able to fit in the fast-growing digital society (Populo, 2019). In the event they didn't acquire them, and they were left behind, the gap would be widening, and, in the end, it would hinder individual and collective development which is generally true when lack of functional literacy is at stake. The more some social groups get advanced, the more the others left behind function as a burden, slowing down the development. If one considers the digital index for single countries one can understand that technology might not be a problem, but the lack of skills is.

Older people won't use tools and devices like Internet or smartphones, this being partially due to the fact that they don't know how to use them. According to the reports on digitalization, over 40 % of older people do not use the Internet. (Statista, 2019)

Digitization is transforming the world we live and work in, creating opportunities for the economy and society. To take advantage of these opportunities, all Europeans –children, students, adults, workers, need to go on acquiring and developing digital skills and



competences throughout their lives. Digital skills are like language or communicative skills. They require a lifelong and a life-wide approach.

The lack of digital skills in the 45+ workers mean social and also economic exclusion as well as their inability to access information and services, including health services; it means less autonomy, and an increased sense of inadaptability. Digital skills are increasingly required for performing instrumental tasks such as searching for contacts, medical help, measuring medical indicators in an e-health service, paying bills, and taking part in democratic processes, having access to e-government, etc. In all these activities adults improve their transferable digital skills. (European Commission, 2019).

There is a growing number of studies on the benefits of technology and the use of Internet. Using the Internet is associated with lower depression and loneliness and higher levels of social support, life satisfaction, purpose in life, and social capital (e.g., bonding with others and bridging social networks) (Chopik, 2016). On a practical level, social relationships reduce stress and depression, which can enhance physical health.

According to the “Digital economy & society in the EU” report (2018), 45+ citizens constitute a low-qualified group in society and are concerned by the need to develop digital competences. Among every action (social networks, listening to music, watching videos, e-shopping, providing personal information, using a software, etc.), mentioned in the aforesaid report by EUROSTAT, the lowest share is for older users (from 65 to 74 years). Thus, this target group (low skilled and low qualified older people) need to improve their digital competences in order to keep/acquire independence, autonomy, and social involvement. Basic actions in daily life are increasingly moving online (banking, online purchases, newspapers, social media...) and need a minimum of digital command.

Adults without the required skills and literacy now face a double exclusion, not only from the real world but also from the digital one. The Sustainable Development Goals (SDGs) devote renewed attention to the importance of literacy by aiming to ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy by 2030.



Users with mobile digital skills are higher data users and have the confidence to move beyond a limited set of application "islands" to more widespread use of mobile apps and services.

A 'literate environment' refers to the contexts, conditions and opportunities that are particularly stimulating and supportive of the acquisition and use of literacy skills. It is important to regard digital solutions as enriching the literate environment in the sense that they offer opportunities for learning and practicing digital skills and literacy.

For developers of digital solutions and instructors of users with low levels of skills and literacy, it is crucial to gain a deep understanding of the target users and follow proven practices to design with – not for – them, in a manner sensitive to particular challenges. If digital solutions are not driven by real needs and are not appropriate to users' contexts, they will not be relevant, usable and beneficial (OECD, 2017).

Developing appropriate digital solutions means understanding the target learners, their individual and group characteristics and their needs.

What are his or her needs and how are they currently being met, or not? What are his or her behaviours and daily routine with regard to the particular need being addressed? What or who are knowledge sources? What are the bottlenecks? Most importantly, what motivates him or her to meet the need?

Ensure content is understandable and relevant for low skilled and low literate users! In general, content works best when it is kept simple and trustable by the target audience. Having content created by the end users themselves helps in this regard. (UNESCO, 2018)

Create content that is simple, clear and trustable! Content that is repeated in different ways. Low skilled adults do not need to tackle every new situation and contents. They need to go in depth using different channels, the digital channels included.

Because low-skilled and low-literate users struggle to transfer learning from digital to real life, content should mirror the actual application environment as closely as possible (UNESCO, 2018).



UNIT 2. FURTHER READING AND CHECKING UNDERSTANDING

- Chopik, W. J. (2016). The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness. *Cyberpsychology, Behaviour and Social Networking*.
- Available on 23. 5. 2021: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5312603/>
- European Commission. (2019, September 19). EPALÉ - Electronic Platform for Adult Learning in Europe- ICT Skills 4 All project: EMPOWERING OLD CITIZENS FOR A DIGITAL WORLD. Available on 23. 5. 2021: <https://epale.ec.europa.eu/en/content/ict-skills-4-all-project-empowering-old-citizens-digital-world>
- McKeever, P. and Patzak, M., 2016. UNESCO Global Geoparks - Operational Guidelines. *Schriftenreihe der Deutschen Gesellschaft für Geowissenschaften*, 88, pp.23-30.
- Populo, M. (2019, November 22). EUROPEAN DIGITAL LEARNING NETWORK - Digital skills for all. Available on 23. 5. 2021: <https://dlearn.eu/news/2019/11/digital-skills-for-all/>
- Statista. 2021. *Internet users by age worldwide | Statista*. Available on 23. 5. 2021: <https://www.statista.com/statistics/272365/age-distribution-of-internet-users-worldwide/>
- Thrive Global. (2019, April 4). How Technology Can Help Seniors. Available on 23. 5. 2021: <https://thriveglobal.com/stories/how-technology-can-help-seniors/>
- Law, N. et al. A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2. (2018). Available on 23. 5. 2021: <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>

CHECKING UNDERSTANDING

1. Older employed adults over 45 years of age are less likely to use new technologies due to the fact that they lack adequate knowledge.

TRUE

FALSE



2. Older people will use tools and devices like Internet or smartphones, this being partially due to the fact that they know how to use them.

TRUE FALSE

3. A 'literate environment' refers to the contexts, conditions and opportunities that are particularly stimulating and supportive of the acquisition and use of literacy skills.

TRUE FALSE

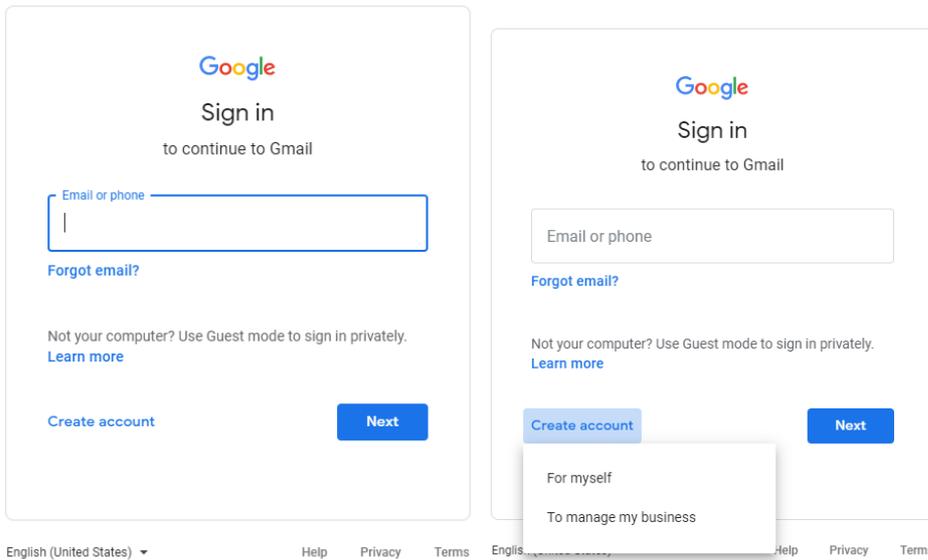
UNIT 3. LET'S MAKE IT REAL AND PRACTICAL

ACTIVITY 1. CREATE AN EMAIL ACCOUNT

Email, short for electronic mail, is the system for sending messages between computers connected in a network such as the Internet. The term also refers to the message itself. An e-mail is usually transferred successfully in a matter of seconds and the recipient can access it and reply whenever it is convenient. A flexible and efficient system, e-mail has drastically changed the way we work and communicate. Billions of messages are sent every day.

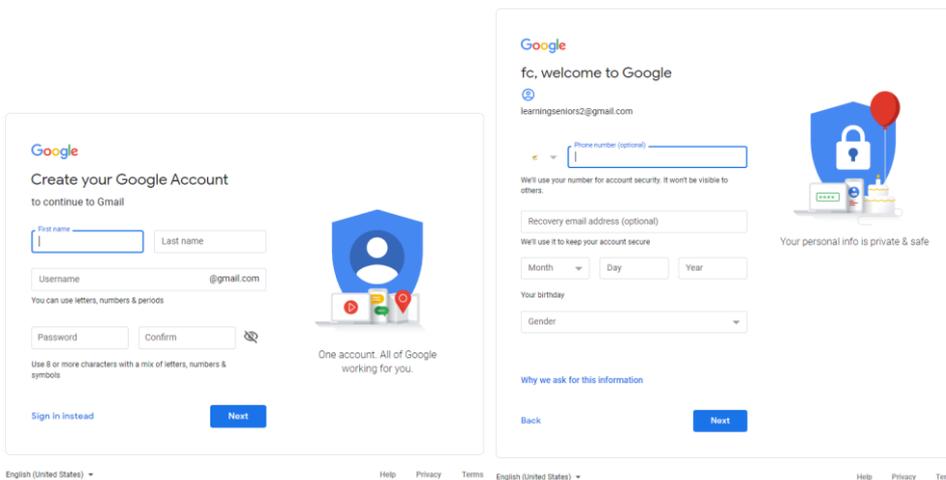
Step 1. Open the browser of your preference.

Step 2. Go to www.gmail.com.



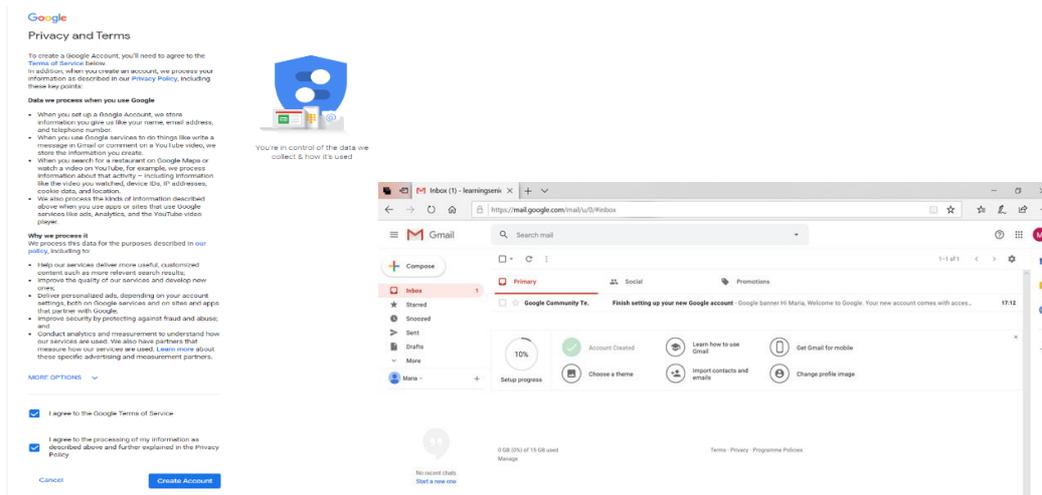
Step 3. Choose “Create account- For myself”

Step 4. The signup form will appear. Fill in the requested information.



Step 5. Here, you'll have an opportunity to set up recovery options. You will need them if something goes wrong. Provide date of birth and optionally some more information.

Step 6. Review Google's Terms of Service and Privacy Policy, click the check box, then click “Create Account”



Step 7. You now have a Gmail account. Start using it now!

Email is used for many different purposes, including contacting friends, communicating with family members, exchanging messages with colleagues and partners, requesting information, and applying for jobs, internships, and scholarships. Depending on your purposes, the messages you send will differ in their formality, intended audience, and desired outcomes.

ACTIVITY 2. COMPOSE AN EMAIL FOR YOUR SCHOOL MATE

Tell your school mate that you have just created your e-mail account.

Dear John,

This is my first e-mail message.....

Kind regards,

Peter

Step 1. Click on the “Compose” button on the top left corner

Step 2. A small window named “New Message” will open on the right side

Step 3. Write the email address of the recipient under the section “To”

Step 4. Write the title of your email under the section “Subject”



Step 5. In the empty space write your message (main body of text)

Step 6. If you wish to attach a file or photo to your email, click on the paperclip symbol

Step 7. A new window will open. Find the file you want in your computer and click open. If you are ready, you click "SEND".

Step 8. You've just sent your first e-mail! Well done!

ACTIVITY 3. FIND A STORY ON YOUTUBE TO READ IT TO YOUR SON OR DAUGHTER

Imagine your child asks you to find a story about a specific fairy-tale and you do not have the written book at home. Then you decide to use your tablet/computer or smartphone to find the story on You Tube.

Step 1. Open any browser of your preference.

Step 2. Type in the Google search bar "Youtube.com".

Step 3. Type in the YouTube search bar "name of the story for kids".

Step 4. Choose one story from the results shown, the one that your kid prefers.

Step 5. Click on the story.

Step 6. The story will start playing.

ACTIVITY 4. HOW TO FIND ONLINE THE NEAREST CASH POINT MACHINE

Imagine you are in another city for a trip and you do not have any cash on you and the restaurant you are having lunch at does not accept cards. Then you decide to find a cash point machine that is close to you using your smartphone.

Step 1. Open any browser you feel more comfortable with.

Step 2. Type in the Google search bar "cash point machine near me".

Step 3. A map with all ATMs will appear.

Step 4. Click on the map.

Step 5. Zoom on the map and find the closest to you cash point machine.

Step 6. Go to the cash point machine and withdraw your money.



ACTIVITY 5. FIND A RECIPE FOR A TRADITIONAL BREAKFAST OF ANOTHER COUNTRY AND GET THE SHOPPING LIST WITH ALL THE INGREDIENTS NEEDED

Imagine you have just woke up and you are still sleepy. You feel hungry and there is just a pack of milk in the fridge. One of your friends has recently visited Cyprus and suggested you to try a Cypriot traditional breakfast. Then you decide to grab your smartphone/tablet or laptop/computer to find the recipe and get the shopping list with all necessary ingredients.

Step 1. Open any browser you feel more comfortable with.

Step 2. Type in the Google search bar “Cypriot traditional breakfast recipe”.

Step 3. Click on one of the results appeared.

Step 4. Example: A traditional breakfast often consists of olives, juicy tomatoes and baby cucumbers, fried/grilled halloumi, eggs and lountza (Cypriot bacon/sausage) and often with fresh crunchy sesame-seed covered bread. Anari (soft white cheese of Cyprus) or yogurt with fresh fruit drizzled with honey are also very popular.

Step 5. Write down all necessary ingredients in a note. (Not necessary).



ANSWERS TO THE ACTIVITIES

Module 1

1 – True, 2 – True, 3 - False

Module 2

1 – True, 2 – False, 3 - True

Module 3

1 –False, 2 – True, 3 - True

Module 4

1 – d, 2 – a, 3 – b, 4 – True, 5 - b

Module 5

1 – False, 2 – True, 3 – False, 5a – True, 5b – False

Module 6

1 –False, 2 – False, 3 – True

ANNEX 1 - Worksheets for module 4

Annexes to the course have not been proofread.



Worksheet 1

“The life of the architect Antoni Gaudi”

Antoni Gaudí i Cornet is a Catalan architect who became internationally famous and recognized as one of the top exponents of modernism.

Throughout his life, **Antoni Gaudi** was a close observer of nature, seeking rationality in its forms to extract from them their full potential and usefulness to construction.

Intuitive, reflective, tenacious and a perfectionist, he had a tremendously innovative spirit.

Nowadays, most people are familiar with his colourful mosaics, natural elements and skeleton balconies, the man behind the surreal buildings and park remains mysterious in some way. Let's have a look at some interesting facts about the life of the genius that you might not know.

✚ **His birthplace is still controversial.**

Antoni Gaudí I Cornet was born on 25 June 1852 in Reus, according to some biographers. Although others claim, he was born in Riudoms, a small village near Reus where his family spent the summers. Despite the unknown birthplace, the following day he is baptised at San Pere Priory Church in Reus, the city where he spends his childhood.



✚ **Gaudí is the only one of his parents' offspring who lived beyond 35 years of age.**

He was the youngest of five siblings. But only his sister Rosa, seven years older than him, and a brother called Francesc reached adulthood. He grew up with his parents, his siblings, his grandmother Rosa la Calderera, his uncles and uncles and his friends.



His brother Francesc died at the age of 25 soon after getting his medical degree. His mother died the same year. Such a big loss affected him deeply. He lost his sister when she was 35. Besides, even his niece who lived with him and his father in the Park Güell show house died at the age of 36.

✚ He was a strict vegetarian

Since a child, he had poor health, so he chose a vegetarian approach to his health issues instead of traditional medicine.

✚ He was often mistaken for a beggar, which ultimately led to his death



A young Gaudí was a stylish young man. However, this changed as time passed. The loss of the loved ones as well as economic hardships and work troubles made him neglect his wardrobe. He was struck by a tram on one of his daily walks and didn't receive much medical attention until the next day when the chaplain of the Sagrada Família identified him. By that time, his injuries were very serious, and he passed away three days later. Why was he ignored for so long? He was mistaken for a beggar.

✚ He never was a brilliant student.

In the early years of Gaudí's secondary schooling, he received poor marks in all subjects apart from geometry and arithmetic, at which he excelled.

Gaudí officially qualifies as an architect. On presenting Gaudí's certificate to him, the director of the University of Barcelona School of Architecture, Elias Rogent, comments: "We have given this academic title either to a fool or a genius, time will show." And it did.



✚ **The Sagrada Família is Gaudí's posthumous success, even during construction.**



Gaudí's cathedral has been under construction since 1882 and is slated for completion in 2027. That's 145 years if anyone's counting. *"There is no reason to regret that I cannot finish the church. I will grow old, but others will come after me. What must always be conserved is the spirit of the work, but its life has to depend on the generations it is handed down to and with*

whom it lives and is incarnated."

✚ **Dali loved Gaudí.**

The two Catalan men shared a unique viewpoint on their craft: they both disobeyed the traditional rules of realism, and they both seemed to be exceedingly wary of the straight line.

✚ **He remained a bachelor**

He dedicated most of his waking hours to his craft, leaving not too much time for a partner. That was, of course, *after* his one (known) love, Josefa Moreu, didn't reciprocate his feelings.

✚ **He was very religious and is currently being considered for sainthood**

One theme that unified Gaudí's later life was his strong faith in Catholicism. Religious imagery appeared in a lot of his work – such as the Nativity scene at the East façade of the Sagrada Família (and of course, the entirety of the Sagrada Família itself). Such dedication to religion got him nicknamed 'God's Architect'. In 1992, the Association for the Beatification of Antoni Gaudí put in place a motion to begin the process of sainthood by the beatification of Gaudí. Today, the Vatican has yet to announce a decision.



1) Questions for discussion

- What did you know about Antoni Gaudí before reading this text?
- If you have been to Barcelona, did you see some of Gaudí's work?
- What facts about his life have struck you most?
- Do you know any other genius who didn't show great results at school?



2) Write a short story presenting Antoni Gaudí to a friend who never heard of him.

References:

<http://www.antoni-gaudi.com/early-life/>

<https://theculturetrip.com/europe/spain/articles/11-awesome-facts-you-need-to-know-about-antoni-gaudi/>

<https://www.lapedrera.com/en/architect-antoni-gaudi/man>

<https://rimasdecolores.blogspot.com/2012/07/gaudi-para-ninos.html>



Worksheet 2

Flashcards

Some of these products everyone can find in your kitchen:

<p>Rice</p> 	<p>Delta del Ebro</p>
<p>Hazelnuts</p> 	<p>Reus</p>
<p>Cheese</p> 	<p>Alt Urgell and Cerdanya</p>
<p>olive oil</p> 	<p>Siurana, Les Garrigues, Empordà, Terra Alta and Baix Ebre-Montsià;</p>
<p>Butter</p> 	<p>Alt Urgell and Cerdanya</p>



<p>Ganxet beans</p> 	<p>Vallès and Maresme</p>
<p>Pears</p> 	<p>Lleida</p>
<p>Calçots</p> 	<p>Valls</p>
<p>Clementines</p> 	<p>Terres de l'Ebre</p>
<p>Llonganissa dry-cured sausage</p> 	<p>Vic</p>
<p>Potatoes</p> 	<p>Prades</p>



<p>Chicken and capon</p> 	<p>El Prat</p>
<p>Apples</p> 	<p>Girona</p>
<p>Torró (Nougat)</p> 	<p>Agramunt</p>
<p>Veal</p> 	<p>the Catalan Pyrenees.</p>



Worksheet 3

You are a couple that invites 2 other couples for lunch. In the other handout, you have the lists of the ingredients to elaborate a main course and a dessert. Please, choose one of each that you would like to prepare for the lunch. The drinks, appetizers, coffee/tea option is up to you. Once you have set up the menu, please, calculate the budget you need taking into account the price of the ingredients (see handout 3), their measurements and the number of the diners.

*When calculating the price, don't take into account small portions of the ingredients that you might have at home, like oil, salt, pepper or some other spices, herb blends etc.

You are a family of four (parents and 2 teenagers). You invite another family of 3 (parents and a teenager) for Sunday lunch. In the handout 2, you have the lists of the ingredients to elaborate a main course and a dessert. Please, choose one of each that you would like to prepare for the lunch. The drinks, appetizers, coffee/tea option is up to you. Once you have set up the menu, please, calculate the budget you need taking into account the price of the ingredients (see handout 3), their measurements and the number of the diners.

*When calculating the price, don't take into account small portions of the ingredients that you might have at home, like oil, salt, pepper or some other spices, herb blends etc.

You are 4 roommates that decide to invite your 4 common friends for lunch. In the handout 2, you have the lists of the ingredients to elaborate a main course and a dessert. Please, choose one of each that you would like to prepare for the lunch. The drinks, appetizers, coffee/tea option is up to you. Once you have set up the menu, please, calculate the budget you need taking into account the price of the ingredients (see handout 3), their measurements and the number of the diners.

*When calculating the price, don't take into account small portions of the ingredients that you might have at home, like oil, salt, pepper or some other spices, herb blends etc.



Worksheet 4

Ingredients for your meals (an example of one meal, each worksheet should include 2 main recipes of the main course and 2 of the desserts, so that the students could choose one of each)

Seafood paella.



Ingredients (8 serves):

20-24 raw shell-on king prawns (500 g)
500 g rice
500 g monkfish (cut into chunks
 $\frac{1}{2}$ x 400 g can chopped tomatoes
500 g mussels, cleaned
100 g frozen peas
1 large onion (finely chopped)
4 garlic cloves (sliced)
2 tbsp olive oil; 2 tsp smoked paprika
a pinch of saffron
handful parsley leaves, roughly chopped

For the stock

1 l of seafood broth
 $\frac{1}{2}$ x 400 g can chopped tomatoes
1 onion; 6 garlic cloves; 1 tbsp olive oil

Flan (creamy custard dessert
topped with caramel)



Ingredients (4-6 serves):

- 4 eggs (L size)
- 500 ml milk
- 100 g sugar

For the caramel topping

- 80 g sugar
- 3 spoons water



Escalivada



Ingredients (4 serves):

1 eggplant
1 red pepper
2 onions
3 tomatoes
1 bulb of garlic
Coarse salt; olive oil

Crema Catalana



Ingredients (6 serves):

500 ml whole milk
7 egg yolks
100 g sugar
20 g corn flour
½ lemon; ½ orange; ½ stick of
cinnamon; 1 vanilla pod



Worksheet 5

Price list of the ingredients (a list of all the ingredients needed for the recipes priced per unit (with its measure indicated) or per kilo and all the other things that might be needed for the lunch, like drinks, bread etc.) e.g.:

Product	Measure unit	Price in €
Milk	Carton (1 L)	0.80
Red Wine	Bottle (750 ml)	4
White wine	Bottle (750 ml)	3.5
Soda (Coca-Cola, Fanta)	Bottle (1.5 l)	1.8
Beer	Can (125 ml)	0.35
Water	Bottle (1.5 l)	0.6
Shell-on king prawns	1 kg	10
Mussels	1 kg	2
Onions	1 kg	0.98
Garlic	4 (a set of 4 bulbs)	1.5
Red pepper	1 piece	0.50
Eggplant	1 piece	1.2
Tomatoes	1 kg	1.5
Frozen peas	Pack (500 g)	1.2
Chopped tomatoes	Can (400 g)	1.5
Bread	A loaf	1.2
Frozen baby brad beans	Pack (500 g)	1.1
Rice	Pack (500 g)	2.1
Seafood broth	Carton (1 l)	1.5
Eggs	Dozen (L size)	1.65
Sugar	1 kg	0.9



ANNEX 2 - Conceptual Guidelines for Devising and Delivering Educational Programmes to Low-Educated and Low-Skilled Adults Aged 45+



*It is clear that we have something to say
and with texts, it is possible to learn words
(M.K., participant in a functional literacy programme)*

Introduction

During the COVID sanitary and economic crisis it has become clear that its »victims« are people with poor literacy skills and fewer possibilities in all areas of life. They either stopped working or became redundant and lost their job. Their children's schooling has been at risk. By contrast with the more educated parents, those in a situation of functional illiteracy are not able to help their children as improvised teachers. It has become obvious that low educated and low skilled people cannot counter the harmful impact the interaction of different personal, family, school and social risk factors has on their children (Blaya, 2010). Moreover, many people in situation of functional illiteracy have a tendency to believe fake news.

It appears that literacy programmes can help to enhance their relationships with reading, writing and mathematics...at work and in everyday life. Throughout the LearnersMot2 project three questions will be asked: (1) How do literacy skills impact older people's working and their everyday life? (2) How can the essential basic skills be developed in everyday life and at work? (3) How can literacy programmes change older adults' engagement with further learning? Namely, LearnersMot, our previous project, made a strong case that older workers with poor literacy skills are rarely invited to participate in educational provision. When convinced to participate and enrol in literacy programmes, they experience good and bad moments impacting *their readiness to learn...*



Therefore, they need to be continuously motivated for staying in education for their own benefit, the benefit of the companies and indeed the entire community. Knowing this, we engaged in this LearnersMot 2 project.

Reaching a common understanding of words and concepts will help developing educational tools and deducing generalisations. This will hopefully enhance the quality of the LearnersMot2 project, its activities and results. Some of the indispensable concepts were already discussed in Deep In 1 (i.e. definitions of functional literacy/illiteracy, etc., competencies, language ability, etc.). Therefore, the reader is invited to read Deep In 1 as well.

Concepts will underpin the following and other project activities/goals:

- turning single motivating approaches, methods and techniques into a constant motivational process in the field of reading, writing, numeracy and other basic skills;
- establishing links between the end-users (the low educated and low skilled older workers) and their social, professional environment through reading, writing and counting and enhance their social inclusion through overcoming shame and guilt they feel;
- selecting the most common environments/areas/activities people in situation of functional illiteracy need to link to in everyday life: work, shopping, health, the use of computer in everyday life;
- dealing with various aspects of numeracy, i.e. mathematics applied to everyday life: using the number in context, estimating and calculating, using money, continuing and predicting patterns and relationships, interpreting proportional reasoning, spatial reasoning, etc;
- supporting the development of digital skills as new basic skills increasing all others;
- deepening basic skills related to oral and written languages, cognitive and cultural skills, communicative and social skills, numeracy and digital skills needed in today's companies and everyday life;
- deepening learning how to learn skills addressing adult educators and their learners;



- offering opportunities for technological socialisation and education of low educated and low skilled workers thus developing interactional learning between adult learners and computers as well as social skills;
- giving constructive feedback to learners in a non-formal education environment through assessment of their knowledge based on problem-solving.

Over the last 30 years, the adult learner audiences have changed due to demographic developments and emerging information society. Many non-traditional audiences have gained access to education among whom low educated and low skilled workers over 45 of age.

Low educated and low skilled workers, like everybody, need to cope with the changing world where the division of work is ever less present and companies are ever more service-oriented, where ever more composite skills are required from each worker. (LearnersMot Deep In 1). Which skills are we talking about?

Basic skills i.e. listening, reading, writing, communication and cognitive skills, cultural skills, social skills, digital skills and numeracy. Actually, there is no literacy without basic skills. In literacy programmes, they cannot be dealt with separately but rather jointly, several at a time.

Besides (basic) **skills** there are **competencies** (PIAAC) and **proficiency skills**, the latter referring to the degree of competence a person achieves. (Schlaihner, 2018)



I. The functional literacy approach- definitions and the need for awareness

The functional literacy approach was initially defined for UNESCO by William. S. Gray as the training of adults to meet independently the reading and writing demands placed on them. (Cospes, Russell, 2021)

Currently, functional literacy is about the acquisition of appropriate verbal, cognitive and computational skills to accomplish practical ends in culturally specific settings.

At a global level, several scholars have discussed *functional literacy*. Collins and O'Brien (2003) argue that functional literacy could be viewed as the literacy that sees the minimum needed skills to meet personal and social needs in general education.

A report by UNESCO (2011) on 'The Current Literacy Situation in the World' holds the view that functional literacy is the envisioned minimum requirements for fundamental education including domestic skills, knowledge of other cultures and an opportunity to develop personal characteristics such as initiative and freedom. The report further reveals that despite the deeper, conceptual aspects of functional literacy, there is little that has been done in articulating it in official national or international definitions. The report also holds the view that international organizations have acknowledged broader understandings of functional literacy, which encompass 'conscientization', literacy practices, lifelong learning, morality, and information and communication, technology literacy.

Freire (1973) indicates that functional literacy is seen as a process by which is achieved the quality of consciousness and awareness, which may be expressed through language and action.

In line with this idea, the UNESCO report (2011) further indicates that



functional literacy is a range of skills and competencies, cognitive, affective and behavioural, which enables individuals to live and work as human persons who can develop their potentials, make critical and informed decisions, and function effectively in society within the context of their environment and that of the wider community.

Freire (1972) felt that before teaching the illiterate adult to read, he or she should be helped to overcome his or her passive understanding and develop an increasing critical understanding of his or her reality. He proposed that such conscientization could be achieved through an *active dialogical and critical pedagogy*.

Dialogue is the means of achieving conscientization. Conscientization requires that an individual changes his or her attitudes, perception or beliefs. In other words, individuals must not accept that social reality cannot be questioned and changed. Critical understanding of situations leads to critical action. (Freire, 1972)

So, *knowing learners and learning audiences* as well as their specific characteristics has become one of the basic concepts in adult education. To devise and deliver successful programmes for educators as the direct target group and low educated and low skilled older workers as the indirect target group, thorough knowledge of these target groups gained through observation of such learners and dialogue with them is needed.

The groups of learners in a situation of functional illiteracy, however, are not easily accessible since those who are in a situation of functional illiteracy hide their deficiencies.



II. How one finds oneself in a situation of functional illiteracy

In LearnersMot functional illiteracy was studied from different perspectives but mostly from the psychological, cultural, sociological perspective, the one of *life condition leading to the situation of functional illiteracy* of adults. This life condition may be characterised by lack of parental emotional support, a large family where not enough attention was paid to single children and their individual needs, long term sickness and absence from school, life transitions, isolation, dyslexia with its different neurological organisation of brain and neurological language, schooling that was not centred on real-life, early dropping out of school as to help parents with their work, long social interruptions, etc. Reasons for one to land in a situation of functional illiteracy are many. (Deep In 1)

Persons in this situation did go to school, wanted to learn but nobody really taught them how to learn and important adults like the teacher, etc. did not respect them nor their learning. Therefore, their bad school memories hinder their learning sometimes or for a lifetime.

On the other hand *social unfairness* on different levels, families are to cope with (poor economic level, poor socio-cultural level, stigma, etc.) strengthen the situation of functional illiteracy of individuals. Living on social allowance, narrow socio-cultural habitus¹, and stigma may contribute to adults “finding themselves *in a situation of functional illiteracy*”.

There is evidence of a life-course trend in skills acquisition and loss which is a highly individual phenomenon. Skills have a tendency to improve up to early middle-age. They reach a plateau in the middle of life. The increase in literacy and numeracy skills post-compulsory education may be a result of worker’s improving skills in employment. The down-slope of skills in older

¹ In sociology, **habitus** encompasses **socially** developed habits, skills and dispositions. It is a combination of group **culture** and personal history that shape body and mind. (Pierre Bourdieu)



age, however, is likely to be related to the ageing process, but it may demonstrate a reduction in the use of those skills as well. (David Mallows and Jennifer Litster, 2016)

Alleviating the problem of functional illiteracy of low educated and low skilled labour force could offer benefits to all: individuals, their families, companies and entire communities.



III.Relevant learning theories

When addressing *learners in a situation of functional illiteracy* a stronger foundation in educational theories is needed to design, deliver and evaluate educational programmes.

Due to its social transformative role, education of learners in a situation of functional illiteracy should never be understood as simple transmission of knowledge, rather as a *collective construction of knowledge*.

There has been a general acceptance that the design of our educational materials should include a foundation in conceptual frameworks. Theories should serve as a frame of reference for project partners and educators to reflect on how to best help learners in situation of functional illiteracy to succeed.²

Numerous *learning theories* might underpin the development of learning materials and the implementation of the educational programmes in this project. Intentionally have been chosen only some of them based on our practical observation of how low educated and low skilled adults learn and our trial and error approach to their learning.

Cognitive learning theory

Cognitive learning theory is relatively relevant for us as it underlines the importance of personal agency as well as social and environmental variables to shape appropriate behaviour and to build both *content knowledge* and *underdeveloped self-regulatory skills*. Initially, learners in a situation of functional illiteracy need to be sure about the steps to take in their learning. They need to be told *how to learn* and they need to be told very simple things like that they need paper and a pen when attending learning sessions. Therefore, the first steps are to be very clear to them and only then self-regulatory principles can be applied, learning in pairs, etc.

² In Slovenia Ana Krajnc named functional literacy courses "courses for being successful in one's life ."



Constructivism

Experiential learning, as well as *inquiry-based* and *problem-based learning approaches*, are representative of constructivist teaching approaches. The underlying principles of constructivism, that students construct knowledge through active engagement in their environment, allow for the use of creative instructional approaches.

Lev Vygotsky viewed learning and development as a social process wherein learners grow into the intellectual life of those around them while

learning is a process in which learners gradually “take for themselves knowledge and skills they developed in their interaction with others and with cultural tools.”

Cultural tools can be quite different: language, symbol systems, calendars, processes, art, maps, writing, writing utensils, technology, and machinery; essentially any tool, tangible or symbolic, that humans use to adapt within the context of their environment. Through exposure to and continued use of cultural tools, appropriation takes place.³ Theory of constructivism is relevant for LearnersMot2 project activities since

learners in a situation of functional illiteracy have mostly been exposed to the influence of their unchallenging and narrow social and cultural environment what in the long run can make them functionally illiterate, less flexible and afraid of change.

Literacy programmes should therefore be designed **to broaden the presence of cultural tools**. All above-cited theories require interactions with the cultural norms, signs, symbols, and tools, and all require access to more expertise than the learner currently possesses.

³ Cultural tools are also alphabet, verbal paradigms, organisation of forms to be filled in (first name, last name, date of birth, organization of letters, texts, etc.), computer applications, systems that take off the burden of constant thinking....and taking decisions. A group of low educated learners learning English did not know verbal paradigms like I am, you are, he, she is....Knowing them is possessing a helpful cultural tool.



Experiential learning theory

David Kolb, interested in how people learn, published his **learning styles model** in 1984. Much of Kolb's theory of **experiential learning** - one learns best through experience - is concerned with the learner's *internal cognitive processes*. Kolb states that learning occurs when abstract concepts are acquired, the ones that can be applied flexibly in a range of situations when they are transferable. Similarly, there is much discussion going on concerning *knowledge, skills and competencies*. Findeisen (2015) argues that competencies are acquired only when the skills and knowledge gained are applied in real-life situations and abstract concepts about work tasks and activities have emerged and have been developed to the extent that they may be passed onto others. Thus it is not enough to be able to build a brick wall, what you need as well as to understand the principles of successful building and can talk about them; when you can describe not only how, but also why, what for, the building goes on, etc., then you can be called competent and can be said to possess competencies. *In Kolb's theory*, however, there is an omission that is relevant to mention. He omits to talk about the person in the centre of the learning process, his and her characteristics. While educated persons do not need experience *learning by doing* and can start right away by using their cognitive abilities by - reading a book for instance or watching a video or talking to an expert - low educated and low skilled learners need to apply skills, carry out a task and reflect on it only later on. This is important to bear in mind when developing a functional literacy educational programme or delivering it.

Low educated and low skilled learners need to apply skills, carry out a task and then reflect on it in an abstract way. This is how they learn.

Those who want to understand how low educated people learn might want to consult numerous other learning theories and might find out that learning is a complex activity that needs observing and using a trial and error approach concerning the learners, the programmes, the implementation of the programme. So let us create our own definition of learning out of many others that might suit our intention.



Learning is the process by which one experiences a relatively stable change in thinking, doing, attitude, behaving in general. For learning to exist there should be a noticeable or measurable change produced. It occurs when a person uses his or her cognitive abilities, body, emotions and senses when the person is exposed to the impact of a learning group and a variety of » cultural tools«. When facilitating the learning of a group of low educated and low skilled learners the educator's methods should be problem-solving, eclectic, focused on learners' life situations and challenges.



IV. Motivating low educated and low skilled older learners

In LearnersMot1 we were interested in how to trigger the **primary motivation for learning** in low educated and low skilled learners aged 45 +. Now, we would like to discuss how to continuously, **permanently motivate older workers to remain in the learning process**. There are some crucial moments, however, when motivating learners has to be particularly intensive:

- when they are invited into the learning provision, the educator has to be ready to cope with their resistance (cf. Motivating Lucy);
- when learners get enrolled and start learning and are ready to quit any moment;
- when learning becomes more demanding for them;
- when learners have to cope with some difficult life events;
- when learners do not like some other learner in the group.

Moreover, learners motivate each other to stay in education and should be encouraged to do so.

Educators should “forget” about the learning curriculum or better should make it as flexible as possible and restructure it whenever needed. They should **start with what learners already know** or **by addressing the learners’ higher psycho-social needs** (the need for decency and esteem, the need for belonging, etc.). Approaching learners through **art** (decency) might impact them positively.

Learning will be addressing learners’ interests, needs, aspirations, whenever possible. To trigger motivation for learning, learning in authentic situations will take place, however, going beyond what is called situational learning which focuses on practical tasks and not on individual learners.



V . The role of adult educators regarding learners in situation of functional illiteracy

Developers of educational programmes and adult educators for low educated learners are supposed to **create learning situations** to match with their learners' abilities, needs, wishes and expectations. The problem here is that the low-skilled mostly do not know what they need, wish or expect nor are they aware of the implicit knowledge they have.

Adults have very concrete biographical experiences which enable them to act in the way they act. **Learning experiences** adult educators trigger are supposed **to stem from their learners' biographical experiences** and should integrate biographic novelties into the existing patterns of interpretation. This implicit knowledge is strengthened and learners know better than before. (Alheit and Hoernings, 1989)

Therefore, more **learner-focused methods** are needed as well as **a combination of different learning locations**.

Adult educators should first learn about what and how learners have learned. Learners will be their basic source of knowledge, despite their being unaware of the knowledge they have gained with informal learning beforehand. Adult educators guide their thinking in the right direction, inquire about their feelings, observe their body language.

Adult educators should have the ability to establish a critical distance towards the contents and the elements of knowledge to be taught. Not all situations will be useful to exploit, not each situation will be a learning situation in a structured educational programme. Educators should constantly bear in mind the context in which knowledge will be used by their low educated and low skilled learners.

A competent adult educator is able to interpret the requirements and limitations of real job or everyday life situations while combining different sources.



VI. How to approach learners in situation of functional illiteracy

The method of choice is “*biography*” or **life history** which is not unfamiliar to professional teaching. Its affinity with the classical task of adult education which is to accompany adults on their lifelong journey is significant. Contemporary life course seems to have become harder and in our times, biographies of working and occupation are becoming less important than they used to be.

Other biographies than work biography have become important, therefore, educational programmes for bettering functional literacy have to be devoted to both life and work biographies.

The method of **life history** seems particularly valuable for persons in situation of functional illiteracy. “Life history is a promising approach that helps adult learners learn about what they already know. They learn when and how and what they learned in the past and discover what motivates them to pursue new educational opportunities in the future.

“Through the process of talking in the group and the process of writing the learners discover not only their learning experiences but also enhance their **critical thinking** and **collaboration in the community**” (Dominicié,2000). Moreover, self-insight should not be a neglected dimension of learning.

Connecting learners’ learning with everyday situations is another essential approach to reach out to learners in situation of functional illiteracy.

The definition of any situation has three parameters: *space, time and scenario*.

Space may vary. It can be intimate, private or public. These different spaces require different activities and different speech acts and types of communication. Learners in a situation of functional illiteracy, however, are not “multilingual” in this respect.



Speaking of **time**, it is either *personal* around the person (shared with people close to the person) or *socially determined* expressed by calendars, schedules, cycles of diverse natures.

The scenario draws upon the recognition of typical developments with known actions mostly called **routines**. Routines help to organize one's life and to plan. Many relevant learning subjects arise when talking with learners about their everyday routine i.e. discovering relationships or latent knowledge and skills to build on when starting a new economic activity, etc.

Learning will be connected with learners' *everyday or daily or routine life or work situations*.

Any every day or daily or routine situation in everyday life and particularly at work may be defined by

- (1) the circumstances and tasks to be performed;
 - (2) linguistic interactions;
 - (3) spatio-temporal environment;
 - (4) the person, the learners and their characteristics.
- (Javeau, 2011)

In everyday situations, persons in situation of functional illiteracy act well taking care to hide their illiteracy, but any changes occurring within these situations may put them out of balance. Not being able anymore to rely on the wisdom of common sense of their parents, nor on their own experience, they get frightened. For learners in a situation of functional illiteracy, changes are daunting.

In LearnersMot 2 we are *interested* in how adults in a situation of functional illiteracy **spend their time**. We will be particularly interested in their daily life, their routine activities and situations at work. *Everyday life, daily life or routine life* comprise how people typically act, think, and feel on a *daily* basis.



Everyday life may be described as routine, natural, habitual, or *normal and is important in literacy programmes. Situations adults face in their everyday life may have similarities but they should be analysed with each and for every single learner.*

In this project, we will be analysing the everyday life and situations of adults in situation functional illiteracy dwelling upon sociological theories of everyday life. (Javeau,2011)

Our civilization has ceased being a civilization of **observation** but in relations to low educated and low skilled adults, educators and animators' observation is essential. Sharp observation is needed for colleagues at work, personal managers, adult educators and animators *to identify* those who are *in a situation of functional illiteracy*, to encourage them, talk to them, spot their **strengths and weaknesses** as well as their **emotions** (fear, uneasiness, shame, past social pain that comes back).⁴

Identifying adults in a situation of functional illiteracy is not easy, since they have developed an array of strategies to hide their situation from the eyes of others.

In the project LearnersMot2, a manual and a course with modules will be written for adult educators who are involved in the education of low educated and low skilled 45+ workers. The educators want **to attract** their learners into educational provision triggering their **primary motivation for learning** and they want **to retain them**. The modules of the course should serve as a learning resource and inspiration. They will be applied to adult educators, but they will not be applied as such directly to the end-users, older learners. "That would be aggressive," said a course leader dealing with life histories of adults in a situation of functional illiteracy wanting to enhance their **reading, writing and saying** and on these grounds their **ties with society**.

⁴ Social pain means the pain one feels when rejected by the group. John T, Cacioppo William Patrick(2008) Loneliness. Human Nature and the Need for Social Connection



It is important for adult educators to use an **eclectic method** and create **small groups** from four to six learners who can help each other and restructure each other's sentences. The role of the group of peers and *peer teaching* is crucial for *developing listening, reading, writing, narrative, cognitive, social, cultural and digital skills*.

The peers and the educator or animator help each member of the learning group *to understand* and *to say, to read and write* without fear to be judged (safe learning environment). It is of primary importance that a **safe learning environment** is created where nobody is judged.

Actually, there is no tool that can be used directly. On the contrary, the adult educator has to have a wide picture of what he or she might work on (contents) and how (methods) *but should adapt to each time, to every moment, to each person.*

Links with learners' life and their social environment *will be established through writing.* Basically, adult educators should take care to establish a direct link between their learners and their **social environment**. Whatever method the adult educator applies, it has to be in the **context** of the learners' life, it should help the learners and the learning group **to solve problems** in their lives helping them to **relate to their environment** and to fully live their life outside of their home, family and workplace.

So, learners should discover their social, professional, cultural or natural environment through reading, saying, writing and doing. Writing out of the need to write make people aware of the issue of literacy.

Integrational linking, through socialized narration. Learners talk in the group but it is even better if they can talk about their **relationship to learning, reading and writing** to a group of people outside their own group. This can be a group of young people in a (vocational) school who do not understand why learning is important and will be important in their future life. By establishing intergenerational links, by taking adult learners as a group to another group with the same problem of learning, narrating, writing, they can encourage both groups.



This is an example of “**socialized**” narration.

“When I was a little boy, I was naughty and kept fighting. I even knocked down two boys so badly that they had to go to the hospital. I am not proud of it. I was constantly opposing teachers. So nobody wanted to have me. I was taken to a special institution. [...] When I received letters from my girlfriend I had to ask my sisters to read them for me. That was embarrassing. [...]. When my wife sent me to do the shopping and she asked for a salad I had to draw it, the same for milk, I drew a box of milk. That was painful. [...] I was not able to spell my address. [...] At work I was good I think, so they gave me some plans to read. I had nobody to ask...I couldn't figure it out. Now it feels good learning. Now I am 25 and it is time for me to.... learn. So learn, learn as not to be like me ...”

A personal narrative is a way of using language or another symbolic system to imbue **life events from different settings** (work, home, pubs) with the temporal and logical order [...] to establish coherence between past, present and as yet non-realized experience (Ochs, E., Capps, L.,2001).

When you change the setting, your narration changes as well, your perspective on the events changes when you change interlocutors, when time changes, etc. People in a situation of functional illiteracy have difficulties including the interlocutor and the circumstances in the narration. In relation to this, the literary philosopher Mikhail Bakhtin argues that “ the life of the (oral) narrative always *develops on the boundary between two consciousnesses*, two subjects! Moreover, **oral narratives** are of different “genre” than the written narratives that “absorb”, “digest”, transform the everyday conversational genre.” It is important that learners involved in literacy programmes may practice different - what in linguistics is called text (written, oral, performed text). They engage in oral narration but also in written narration, or even performed narration on the stage while deepening their understanding of the text itself. (Dentith, 1995)



Knowledge cannot be transmitted, it is being constructed collectively and learners' writing must be meaningful. What they could not say in the past they can say now in the educational programme.

Moreover, is possible to shape the *attitude to reading and writing* by talking about what learners have read, written, how their parents and grandparents felt about reading and writing. Memories about reading and writing can be exploited. To illustrate this point, the first and the last piece of writing for which learners were marked? Memories lead to a different perspective, and in social situations, there are direct relationships between reading and saying.

Numeracy

Beliefs about learning, about learners, about the subject taught, etc. differ. In addition, adults learn mathematics in very diverse contexts and mathematics is believed to be either *a tool*, *a system* or **a problem solver**. A problem-solving view of mathematics is the most beneficial for learners in a situation of functional illiteracy. (Sommer, 2020)

All cognition in general and learning, in particular, is situated. So, situated learning can be perceived as a **function of activity, context and culture** while the context is *mostly everyday life activities*. Moreover, learning should target **authentic context**.

Inspiration can be found in mathematical picture books addressing children where situations in children's lives with potential for children's learning mathematics are pictured. Situations in books are to be considered, talked about, acted out, etc.

As in other skills, acquiring numeracy is connected to everyday life situations. If this is the educator's belief, he or she recognizes that **learning can occur in interaction**. In addition, educators' conception of the physical world also accounts for their conception of learning mathematics. They can view reality in their subjective or objective way.



Numeracy is a complex skill in itself and its relations with most areas and activities of everyday life are not well researched (health, managing time, managing social relations, geography, reading maps, digital devices, etc.). Poor numeracy skills in adults can get reflected in poor reading tables, filling in forms, reading schedules, calculating, poor linear representation of numbers, etc.

The latter can be addressed through numerous *educational games*, board games, etc. adults in a situation of functional illiteracy might later use it in playing with their children.

With such games, it is possible to improve at least four areas of mathematical knowledge like identifying numerals, counting, comparing number magnitudes, understanding a number line.

Adults in a situation of functional illiteracy should make mathematical discoveries to better integrate into everyday life, use material and time in the right proportions.

Identifying and observing everyday life situations. As to integrate mathematics into learners' everyday life, programme developers and educators should observe their life, identify related situations and activities (cooking, repairing, setting table - there is a possibility to count pieces of dishes and cutlery for each person at the table, or the number of guests is being counted and then the entire number of dishes, cutlery, etc.). It is indispensable that educator identifies situations having potential for stimulating learning mathematics. (Peter-Koop/ Grüßing, 2007). Pictures with real photos of learners in situations can be collected representing counting, space and form, patterns and structures, quantities and measures, probability, dates.⁵

⁵ <https://opentextbc.ca/introductiontosociology2ndedition/chapter/chapter-8-media-and-technology/>



Digital skills

There are many divides in our fragmented societies, not only the digital one, that need to be addressed particularly in countries with **low digital economy and society index (DESI)**. Some older workers and learners, be they well educated or not, voluntarily cut themselves from new technologies and thereby from understanding how the contemporary world functions. Digital skills, being basic skills based on a person's **technical biography**⁶, support the development of all other skills. They can be effective for older learners making them feel empowered and in control of their own lives. Digital skills help their relationships with families, colleagues at work, communities and even beyond. They better independent access to public and private services. The lack of access to technology can marginalize older low educated and low skilled workers from the mainstream of development, undermining their economic and social roles, reinforcing their dependency on others. Developing digital skills through education should not be separated from educational contents, rather integrated into them (also in all educational modules contained in the educational programme for educators we are going to develop in the LarnersMot2 project).

⁶ Technical biography comprises socialization by technical devices like a radio set, tv sets, phone, household appliances, car etc.



Conclusion

Education of adults in a situation of functional illiteracy aims primarily to socially integrate them through reading, writing, telling, counting while inking these skills to their professional, social and cultural environment. Educating them requires combining learning and didactics oriented towards real-life situations. This demands *structuring teaching and learning situations* that have learning potential. **Educational programmes should include the** identification of learners' existing knowledge gained in their various social roles and the development of basic skills based on situational learning. Problem-solving methods addressing challenges low educated and low skilled older workers have to cope with are to be used. Educators should help learners in a situation of functional illiteracy to discover themselves, go out and live outside their home.



Literature and references

Alheit, P., Hoernings, E. (1989) *Biographisches Wissen : Beiträge zu einer Theorie lebensgeschichtlicher Erfahrung*. Frankfurt/Main, New York: Campus Verlag.

Alheit, P. (1994) *Taking the Knocks: Unemployment and Biography: a Qualitative Analysis*. London: Cassel.

Alheit, P. et al (1995) *The Biographical Approach in European Adult Education* Vienna: Verband Wiener Volksbildung.

Collins, J.W., O'Brien, N.P. (Eds.) (2003) *Greenwood Dictionary of Education*. Westport, CT: Greenwood.

Blaya, C. (2010). *Décrochages scolaires. L'école en difficulté*. De Boeck: Bruxelles.

Cosper, R. *The Teaching of Reading and Writing* by William S. Gray. *Journal of Developmental Reading*, vol. 1, no. 1, 1957, pp. 55–57. JSTOR, www.jstor.org/stable/40017241. Available on 14 01. 2021.

Die Entwicklung mathematischen Denkens in Kindergarten und Grundschule: Beobachten - Fördern - Dokumentieren. Offenburg: Mildenerger, S. 150-159.

Dominicié, P. (2000) *Learning from our Lives*. San Francisco: Jossey-Bass.

Dentith, S. (1995) *Bakhtinian Thought. An Introductory Reader*. London, New York: Routledge.

Findeisen, D. (1997). *Kaj napravi manj izobražene odrasle drugačne?*. *Andragoška Spoznanja*, 3(1), 27-29. <https://doi.org/10.4312/as.3.1.27-29>



Findeisen, D. (2015) Competencies in Adult Education. Where Do We Stand?

<http://www.utzo.si/wp-content/uploads/2015/08/Competencies-in-adult-education.pdf>

Findeisen, D. Competencies or culture of adult educators, this is now the question. In: 8th Adult Education Colloquium: Education and Training of Teachers in Adult Education, Ljubljana, 22-23. October 2004.

Freire, P. (1970). Cultural Action for Freedom. [Cambridge], Harvard Educational Review.

Freire, P. (1973). Education for Critical Consciousness. New York, Seabury Press.

Javeau, C. (2011) Sociologie de la vie quotidienne. Paris: PUF

Kaufmann J.C. (1989) La Vie ordinaire. Voyage au cœur du quotidien Paris: Greco.

Kolb, D.A. (1984): Experiential learning: Experience as the source of learning and development Englewood Cliffs, New York: Prentice Hall.

Mallows, D. Litster, J. (2016) How can we motivate adults to engage in literacy and numeracy learning? Future of Skills & Lifelong Learning Evidence Review Foresight, Government Office for Science.

Mercure, D. (1995) Les Temporalités sociales. Paris : L'Harmattan.

Motivating Lucy: <https://www.youtube.com/watch?v=exlbyzgKDck&feature=youtu.be>

Ochs, E., Capps, L. (2001) Living Narrative. Creating Lives in Everyday Storytelling. Cambridge, Massachusetts, London, England: Harvard University Press.

Peter-Koop, Andrea (2006): Mathematische Bilderbücher - Kooperation zwischen Elternhaus, Kindergarten und Grundschule. In: Grüßing, Meike/Peter-Koop.



Peter-Koop, Andrea/Grüßing, Meike (2007): Mit Kindern Mathematik erleben. Velber: Lernbuch Verlag.

Pineau, G: Illéttisme et scolarité, Histoires de vie. Tours ; Laboratoire des Sciences de l'Education Université de Tours. Available on 15/01/2020

https://www.canal-u.tv/video/profession_formateur/01_illettrisme_et_scolarite.670

Salvator, H. (1995) Les Formes élémentaires de la vie quotidienne. Paris: PUF.

Schlaiher, A. (2008) PIAAC: A new strategy for assessing adult competencies. International Review of Education. Springer.

Sommer, M. (2020) Beliefs matter in numeracy education, An interview with Sonja Beeli. Elm Magazine. Adult education and Numeracy and Finance. 30/o8/2020.

UNESCO (2011) on 'The Current Literacy Situation in the World'

Windisch, H. (2015) Adults with low literacy and numeracy.skills: A literature review on policy intervention. OECD. Education Working Papers, No. 123, OECD Publishing, Paris



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