

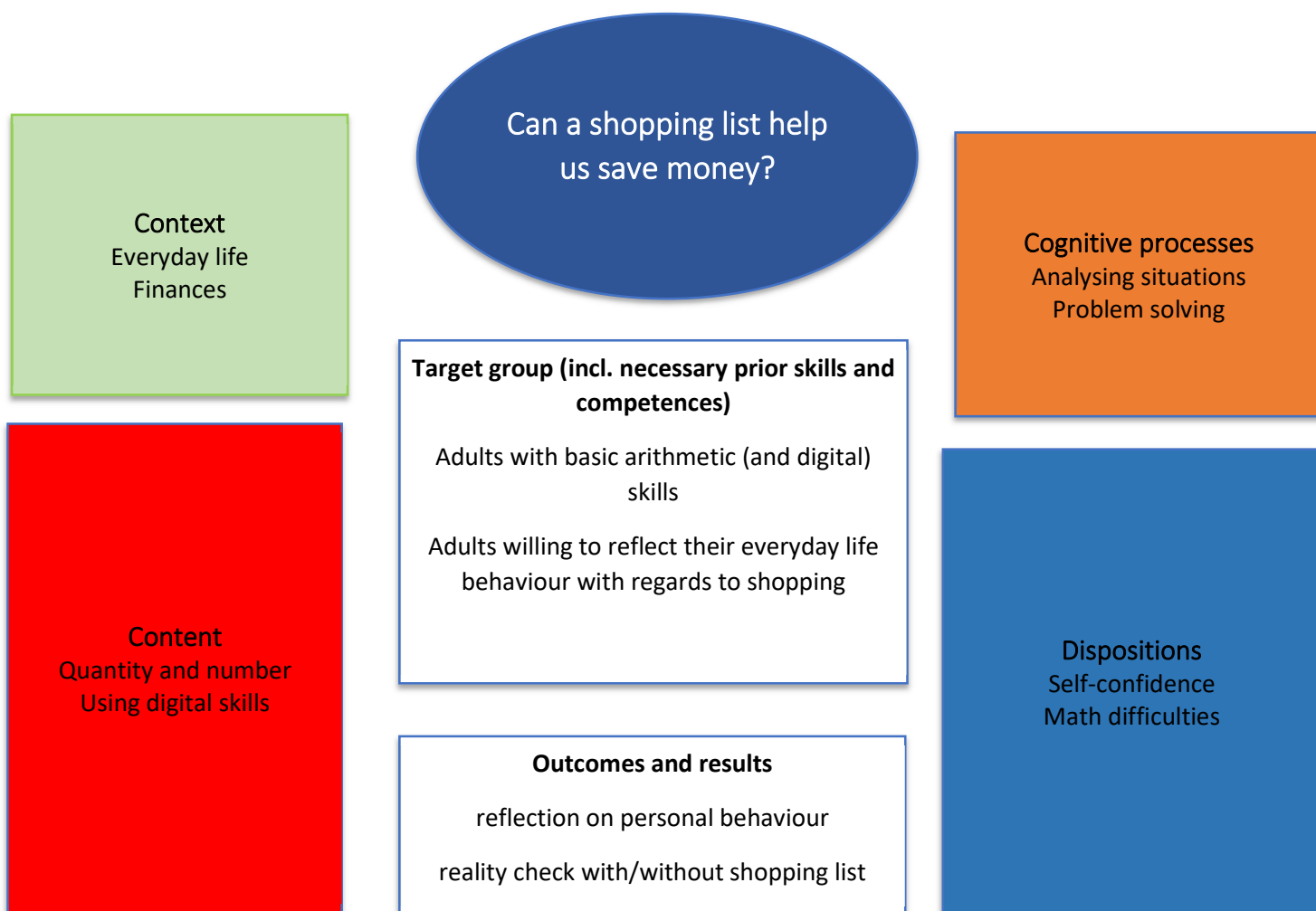
PLANNING PURCHASES

Should a shopping list become part of my life to help me save money?

We are used to going shopping – some of us do it nearly every day. Nevertheless, when shopping, sometimes the overview is lost. Being famished you rush into the supermarket and buy whatever makes your mouth water. As a result, we buy too much and unnecessary thing spontaneously. This makes daily shopping even more expensive.

However, there are ways to help us save money. One of them is to plan the purchase of groceries for our daily needs. Maybe a shopping list could help us with this problem...

Overview “Should a shopping list become part of my life?”



Main information	
Content	Quantity and number: (whole) number addition up to 100; counting, sorting, basic arithmetic operations with integers, money, simple common quantitative representations (coins) possible Using digital skills
Target group	Adults with basic arithmetic (and digital) skills Adults willing to reflect their everyday life behavior with regards to shopping
Learning intention	Numeracy skills for practical and personal purposes in daily life
Duration	Approx. 6 lessons
Material and resources	Picture cards with food and refrigerated goods and their names, play money (€ and c), powerpoint slides with pictures for introduction, brochures of various food shops, shopping list template. brochures
Group size	About 10 learners
Problem statement	It is difficult to plan the purchase of groceries and sometimes the overview is lost when shopping because of buying too much or spontaneously. This makes daily shopping even more expensive.
Working questions	Do you plan purchases and compare prices? Do you compare prices? Do you sometimes buy things you don't really need? Why do you like/dislike shopping? How often do you go shopping in a week? Can a shopping list help you save money? How can you organize your shopping list?
Learning outcomes and results	Learners prepare a shopping list with estimated prices Learners recognize (rising) prices Learners estimate what (food) they can buy for a certain amount of money. Learners understand (whole number) addition up to 100. Learners transfer skills to personal and private life

Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information ¹
Lesson 1	<p>Cognitive activation: Introduction to the topic and cognitive activation; building on the experiences of the learners</p> <ul style="list-style-type: none"> Tell a story with pictures (“The day started well...”) Link to the experiences of the learners <p>Alternatively, teachers can present a picture of wasted food as a silent impulse as cognitive activation and introduction to the topic.</p>	<p>Picture card story (see appendix 1)</p> <p>Possible questions: Is everything getting more expensive? Do you plan purchases and how? Do you compare prices? Do you sometimes buy things you don’t really need? How often do you go shopping?</p> <p>silent impulse: “Bought too much!” – see appendix 2</p>	<p>hands on learning</p> <p>HITS Metacognitive strategies, Questioning, Collaborative learning</p>
Lessons 2 -4	<p>Modelling Draw up a shopping list with picture cards, then estimate the prices. Put on coins accordingly.</p> <p>Create a written shopping list, enter the price as a whole number in the shopping list and introduce operators (mental arithmetic, calculate in writing, add to the model)</p> <p>Introduce limit for shopping (e.g. € 10 or € 20) and rebuild model accordingly (by adding, giving away)</p> <p>Draw up the final shopping list, reflection</p>	<p>Picture cards of groceries coins and banknotes (play money)</p> <p>shopping list (template) – see appendix 3</p>	<p>Scaffolding Analyse situation</p> <p>Putting learners in a mathematical situation</p> <p>Problemsolving</p>

¹ for description and explanation of kinds of tasks, HITs and other background information please consult the teachers’ guide

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Lessons 5 – 6</p>	<p>Transfer Immersing the learners in an authentic experience, divide them into two to four groups: Their task is to create a delectable dish for the entire group, requiring them to embark on a shopping expedition. This can be accomplished by physically navigating a real store, virtually filling their online baskets, or carefully perusing the latest brochures for inspiration and ingredients.</p> <p>The whole group agrees on a dish or menu. Then, the group splits into two halves - one half goes shopping with a shopping list, while the other half goes shopping without a list.</p> <p>Comparison and reflection</p>	<p>Possibly: digital devices, brochures</p>	<p>Small group work</p> <p>Putting the learners in a mathematical situation</p>
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Suggestions for the teacher

The example presented here should be considered as exemplary and inspirational material presenting a guideline with a high range of possibilities of adapting those suggestions to a specific group of learners or an individual learner with his or her very personal requirements.

In concrete terms, this example could be adapted these ways:

- Duration: Teachers can easily vary the duration of this example by adapting the phase of activation (letting out the picture card story and starting more “in-medias-res”) or by changing the phase of transfer which, of course, not only takes time resources but also requires planning and a lot of activity within the learners.
- Further or additional material: Depending on the (digital) skills and equipment of the learners or the learning environment, teachers can bring in digital devices and tools that could help the learners solve the given tasks. These can be digital shopping lists (e.g. the app “Bring!”), apps to compare prices (e.g. the app “Smhaggle”) or the online stores of supermarkets.
- Level of difficulty: The level of mathematical skills required or the difficulty of the tasks presented in the example can be varied by a) only using whole numbers for the prices or b) also using decimal numbers – which, of course, is much more realistic.

Our educational activities aim at numeracy skills being not only memorized, but first of all being practiced and functionally used by the learners in daily life or/and vocational situations. It is therefore recommended to implement the idea of HITS² (higher impacts of teaching skills) as far and often as possible: ...

- ... work with concrete and authentic material that learners will recognize from everyday life situations. In this concrete example, it is recommended to work with brochures and compare “real-life-prices”. It would also be attractive to work with real (Euro) coins. If this is not desired (by the teacher or the learners), it is also helpful to use realistic play money.
- ... ask the learners questions and let them raise questions themselves. It can be crucial to discuss numeracy themes, contexts and numbers. We should put learners in a mathematical situation, allow discovery learning and promote problem-based learning.
- ... think of possible ways of transfer: In this example, we present a possibility of transfer in a real-life situation. It is also recommended that learners get to know digital devices (apps just like “Bring!”) that could help them plan their purchases.

² For general information and explanation on HITS please see [\(link\)](#)



Appendix 1

Picture card story

Sources of pictures: www.pixabay.com [14.06.2023]



The day started well ...

After getting up, I went to my fridge. I opened the door.

The fridge was empty.



I don't like to go shopping. I always buy more than I need. Those costs! Especially now as everything is getting more expensive.



But today I really have to go shopping. To save money, I make myself a shopping list

Appendix 2

Silent impulse for activation

Source of picture: www.derstandard.at/story/2000108920183/wirtschaftskammer-lehnt-oevp-plaene-zum-umgang-mit-lebensmitteln-ab [14.06.2023]



Bought too much. Do you know this too?

What do you think about it?

Share your thoughts with the person sitting next to you.

Appendix 3

Shopping list (template)

Source of image: www.unsplash.com [13.06.2023]

My shopping list

Vegetables and fruits	Estimated price
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
Milk and milk products	
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
Fish and meat (products)	
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
Snacks	
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
Others	
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____
<input type="checkbox"/> _____	€ _____