









LOLT Collaborative learning



In this overview, we provide a brief introduction to collaborative learning in relation to literacy and older adults. The overview is based on both academic and non-academic literature. In the first part, we present the basics of collaborative learning, after which we provide five key principles of the approach. Lastly, we put forward case examples of collaborative learning, and a list of suggestions for further reading.

Collaborative learning

Collaborative learning involves group-based education and learning to accomplish a shared learning goal (Hernández-Sellés, Pablo-César Muñoz-Carril, & González-Sanmamed, 2019). Often, collaborative learning is centered on shared everyday life challenges and needs, and by using the approach, learners expand on their existing knowledge and skills. For example, new knowledge on healthy behaviors or managing life with disease may be gained collaboratively with peers. By being engaged in the learning context, the skills needed for translating insights into changes in everyday life practice is strengthened. Collaborative learning covers a wide range of methodological approaches, where the learners are actively involved and engaged in the process towards learning. The different methods involving collaboration creates the opportunity for the learners to set the agenda of their own education which enable that the topics to be explored and the knowledge produced is based on the values, interests, and priorities of the learners (Tørslev & Kristiansen, 2021). Collaborative learning is shaped by the idea that working together by discussing, deliberating, and creating meaning will facilitate sharing of knowledge, resources, and skills among the learners while working towards a shared goal (Wisconsin Department of Public Instruction, 2011). Learners can be engaged through co-design and co-creation of ideas and activities towards the shared goal, where learners' together search for understanding, meaning, or solutions related to shared challenges (Smith & MacGregor, 1992). Thus, a key side effect of collaborative learning is that the approach builds and strengthen a sense of social coherence and community among the learners, which often proves to be important when collaboration happen among senior learners.

Most often, a teacher facilitates the process. The teachers can have different backgrounds, and thus be professionals, volunteers, peers etc. (Hernández-Sellés et al., 2019). The learning sessions can take place at various settings such as community-based facilities, private homes, hospitals, primary care, municipality facilities, faith and culture centers or similar. Choosing a setting related to the learners' everyday life will support implementation of the new knowledge and skills into their lives following the sessions.

Collaborative learning holds a number of benefits to both the learners and the teachers. The **benefits to the learners** include that the approach provides the learner with a voice to express their needs and preferences, ensuring empowerment, ownership, and active engagement. These benefits may improve the functional health literacy of the individual, and strengthen the probability, that the newfound knowledge and skills are implemented and used in everyday life of the learners (Bønnelycke, Sandholdt, & Jespersen, 2019; Sørensen, Van den Broucke & Fullam, 2012). The **benefits to the teachers** include that the approach builds understanding, empathy and compassion for learners, while making learning more engaging as well. Further, the teacher will benefit from facilitating dynamic and diverse groups of learners, and thus improve her own cultural literacy by learning the nuances of different cultures, assumptions, ideas, and ways of engaging and communicating with participants.





LOLIT Collaborative learning



Collaborative learning and older adults

Collaborative learning among older adults holds great potential within several and entangled fields of literacy such as functional literacy (everyday tasks, capacity to access, process and learn new skills etc.), health literacy (loneliness/social relations, rehabilitation, health promotion etc.), and digital literacy (using technology, e-learning, digital transformation etc.). In recent years, there has been a focus on health promotion, wellbeing, and quality of life among older adults using digital technologies (Jin, Kim, & Baumgartner, 2019; Romero, Hyvonen, & Barbera, 2012). As an example, collaborative learning can facilitate and support senior learners in (further) developing skills related to digital health technologies (digital literacy), which in turn will improve their access to and knowledge on health-related matters (health literacy). In addition, digital technologies enable social and intergenerational communication while also considering the potential mobility difficulties that senior learners may have (Jin et al., 2019; Romero et al., 2012). Not only does collaborative learning activities and digital technologies provide an opportunity to share information, expand on existing knowledge, and enable solving everyday difficulties, but also to facilitate social relations by supporting senior learners to become a part of a community (Jin et al., 2019; Romero et al., 2012).

Besides key elements of collaborative learning such as engagement and active participation, collaborative learning is characterized by five key principles, which will be elaborated below.

Be person-centred

Learning should be person-centered meaning that topics and activities should be based on the learners' own experiences and learning processes, rather than be passive teacher-learning (Dewey, 2004; Smith & MacGregor, 1992). A person-centered – or learner-centered – approach will enable activities to be adapted the individual learner and/or group, and thus be meaningful to them (Dewey, 2004; Jones et al., 2018). For teachers, a person-centered approach will generate empathy in the process of understanding the learners' lived experiences, biography, values, and priorities through their perspective. Examples of how to be person-centered during collaborative learning:



- Learning should be based on the learners' own experiences and support an experimental approach to learning new skills and knowledge
- Learners should be supported in ways that fits both the individual groups and the individuals in them, and the activities and content should be adapted to the individual group
- Focus should be on the process rather than the result
- Learning should be active and engaging

Be creative

Connectivity is key in collaborative learning, by which the teacher must create a learning space that enable innovation by stimulating creativity. The environment and atmosphere created should be safe and support ideas to be shared (Den Brok, Van Eerde, & Hajer, 2010). While creativity previously has been viewed mainly as an individual attribute, it is now recognized that it is also a shared process that is co-produced collaboratively in groups (Romero et al., 2012).





LOLT Collaborative learning



Graphic facilitation and visual content are examples of a creative methods that can be used during collaborative learning (Srivarathan, Lund, Christensen, & Kristiansen, 2020; Tørslev & Kristiansen, 2021; Sandholdt et al., 2020). These creative methods hold a number of potentials:

- Stimulates ownership due to the active participation, e.g., by including photos, drawings, or videos centered around the learners own everyday life
- Learners set the agenda and get the opportunity to share their experiences and define what is meaningful to them
- Allow learners to use non-verbal forms of expression enabling reflection of embodied knowledge which may be difficult to express in wording
- The alternative form of expression can accommodate the learners' potential different verbal resources (based on age, language skills, jargon, educational level, ethnicity etc.

Be inclusive

This key principle is interlinked with the first principle. For teachers to be learner-centered within a group comprise probing of social engagement, interactions, and support of a pleasant group dynamic. This will enable empowerment in the production of ideas and learning (Sandholdt, 2021; Sandholdt, Cunningham, Westendorp, & Kristiansen, 2020). To achieve this, the teacher should be inclusive and inspire participation of all senior learners to ensure that everyone gets to share their ideas, everyday life challenges, and solutions to gain diverse insights across a diverse learner-group. This is not least important as society is becoming increasingly diverse. For teachers to stimulate diverse learners' stresses that they adapt their teaching and attitude to fit the likely new challenges that this entails (Ladson-Billings, 1995). Further, it becomes important to uncover the diverse learners' individual needs and difficulties that are shaped by different backgrounds and references (Den Brok et al., 2010), and likewise, to challenge each learner as well as encourage new experiences by joining the learners in the process and guide them to explore the meaning of learning (Dewey, 2004). An example of how to include and engage diverse learners is the project Health, Well-being, and Social Relations in a Changing Neighbourhood. The project examines the effect of large-scale structural changes on health, wellbeing, and social relations among middle-aged and older adults living in a multiethnic social housing area. The project included several participatory elements to ensure engagement of the diverse older residents (Tørslev & Kristiansen, 2021; Lund et al., 2019). This included:



- Graphic facilitation to accommodate different verbal resources
- Field trips to sights based on the older adults' wishes and preferences to ensure relevance
- Workshops including interpreters to ensure diverse participation
- Versatile communication to reflect the diversity of the neighborhood in terms of language, culture, and socio-economic status (websites, newsletters, leaflets in the housing entrances, graphic facilitation, information in different language etc.).

Matters to consider that potentially affect inclusion: 1) learner-group size; 2) homogeneous/heterogeneous group (ability, age, gender, culture, language skills); 3) tasks or activities; 4) recruitment into the groups; 5) accessibility (isolation and/or functional abilities, e.g. older adults who are visually impaired, uses a wheelchair etc.).







Be playful

A key element that advantageously can be implemented into collaborative learning is fun and playfulness. Encouraging learning using 'fun' activities increases the motivation and interest of the learners, by which it has a positive effect on the learning outcomes of the learners (Tews, Jackson, Ramsay, & Michel, 2015; Tews, Michel, & Noe, 2017). Fun activities embrace learning by doing as a method (Dewey, 2004), and include games, competitions, field trips, playing music and similar hands-on activities that encourages active engagement (Tews et al., 2015). For more examples on incorporating fun activities and meaningful play into collaborative learning, please see "Meaningful Play Overview" (Leyden Academy on Vitality and Aging, 2022).

Continue engagement

Engagement, collaboration, and activities should be ongoing and continue to be based on the ever-evolving needs and preferences of the learners (Dewey, 2004; Sandholdt et al., 2020; Tørslev & Kristiansen, 2021). Continuous engagement and support of learners will ensure that learners' newfound knowledge and skills are implemented in everyday life. Further, engagement using e.g., evaluations will allow for long-term learning trajectories with a focus on adaption, support, maintenance, and further development of person-centered needs of knowledge and skills. 'Buddy systems' or navigator programs are examples of how to continue engagement and production of knowledge and skills using a learner-centered approach. Please see "Case study 2. Patient navigator programs" below, providing an elaborated example.

Case studies

In the following, we provide you with examples of promising practices of collaborative learning in the context of health literacy. The examples show diversity in how to approach collaborative learning, ensuring engagement, empowerment, and person-centeredness.

Case study 1. Heart Healthy Food (Denmark)

The Heart Healthy Food project was a culturally adapted intervention seeking to promote healthy dietary behavior and cooking practices among middle-aged and older ethnic minority women with the aim to prevent cardiovascular disease. The intervention was co-created by the Danish Heart Foundation (DHF) and Danish non-governmental organization Neighbourhood Mothers with culturally diverse backgrounds in order to reach ethnic minority women in social housing neighborhoods. The intervention used participatory approaches and collaborative learning during two phases: 1) co-designing a cookbook of traditional recipes chosen and produced by ethnic minority volunteers (person-centered, and creative), and later adapted to comply with the formal Danish dietary recommendations





LOLIT Collaborative learning



The cookbook was thus co-designed between volunteers (laypersons/target population), DHF, and dieticians; 2) execution of five instructor courses in different areas with similar housing and socio-economic status in Denmark with invited members of the Neighbourhood Mothers participating as volunteers/instructors. The aim of the instructor courses was to provide volunteers (laypersons) with communication and basic teaching skills, skills related to organizing cooking events, and with insights into dietary recommendations and healthy cooking practices using the co-designed cookbook recipes. Then, the volunteers were encouraged to organize cooking events in their local neighborhood to teach their newfound skills onto learners consisting of peers (inclusive and playful). Thus, during these peer-to-peer events learners were taught about dietary recommendations and healthy cooking practices using recipes from the co-designed, culturally sensitive cookbook to strengthen health literacy, and overall social relations, among middle-aged and older minority women (continuity of engagement).

Source: Pallesen, Byberg, & Kristiansen, 2019

Case study 2. Patient navigator programs (Denmark)

As the population ages their healthcare needs become increasingly complex and diverse, by which the need for various types of services across different providers increase (health, social matters, community etc.). To accommodate these complex care needs, the notion of patient navigators has been introduced to help patients overcome barriers and facilitate learning of new skills and knowledge needed to navigate the healthcare system. Typically, the focus of the navigator programs has been on cancer care, transitional care, and care for vulnerable and disadvantaged populations.

Patient navigator programs is a form of collaborative learning between a navigator (professional or lay person from the community who volunteer), the patient, and the community. Together with the patient, the navigator identifies the needs and preferences of the patient (person-centered), and help the patient acquire new knowledge and skills by e.g., read and understand letters from hospitals or social services (inclusive), or attend consultations together with the patient, and set reminders of upcoming consultations. Navigators also support self-management, and often involve and educate community members (continue engagement).

Source: Budde, Williams, Scarpetti, Kroezen, & Maier, 2022











Case study 3. Old and wise enough?! (the Netherlands)

In the Netherlands, a growing number of first-generation migrants is growing older. Many of the older migrant women have cared for their husband and children their whole life and expect their children to now look after them. Even though this ideal image of family care still exists, the reality is very different. It is not as common anymore to live closely to your parents, daughters have jobs now, or are busy with their education, resulting in adult children to be unable to meet the expectations of their parents. At the same time, the parents often heavily depend on their children for help with their administration, translations during doctor visits, etc.

These problems are especially evident for the older women. As a results, Dona Daria (the Knowledge Centre emancipation Rotterdam) and NOOM (Network for Organisations of Older Migrants) came up with the project Old and wise enough?! This project aimed to activate and empower Turkish, Moroccan and Cape Verdean women aged 50 and older. During a course of 10 meetings, the women exchanged experiences and talked about how they imagined a good old age. They used pictures and movie clips from their past to help talk about their expectations and see themselves as strong women again (creative). The focus was on the women themselves, their needs and wishes and not those of their family (person-centred). Simultaneously, the women were introduced to various facilities in the nearby surroundings that they could use for their old age (continue engagement). In this way, the women were supported in developing self-reliance and become engaged members in their local neighbourhood. What was special about this project, was that the daughters of the women were also involved in the project. By including the daughters, the mothers were able to express their feelings and concerns about the aging process and potential lack of support from their children. This started the conversation about family care and personal expectations from both generations (inclusive).

Source: Dona Daria and NOOM, 2013







LOLT Collaborative learning



Literature

- Bønnelycke, J., Thiel Sandholdt, C., & Pernille Jespersen, A. (2019). Co-designing health promotion at a science centre: distributing expertise and granting modes of participation. CoDesign, 15(2), 128–141. https://doi.org/10.1080/15710882.2018.1434547
- Budde, H., Williams, G. A., Scarpetti, G., Kroezen, M., & Maier, C. B. (2022). What are patient navigators and how can they improve integration of care? 1–32. Retrieved from https://eurohealthobservatory.who.int/publications/i/what-are-patient-navigators-and-how-can-they-improve-integration-of-care
- Den Brok, P., Van Eerde, D., & Hajer, M. (2010). Classroom interaction studies as a source for teacher competencies: The use of case studies with multiple instruments for studying teacher competencies in multicultural classes. Teachers and Teaching: Theory and Practice, 16(6), 717–733. https://doi.org/10.1080/13540602.2010.517689
- Dewey, J. (2004). Individ, skola och samhälle: utbildningsfilosofika texter (4th ed.). Falköping: Natur Kultur Akademisk.
- Dona Daria & Noom. (2013). Oud en wijs genoeg?! Methodiekbeschrijving. Utrecht/Rotterdam, the Netherlands.
- Hernández-Sellés, N., Pablo-César Muñoz-Carril, & González-Sanmamed, M. (2019). Computer-supported collaborative learning: An analysis of the relationship between interaction, emotional support and online collaborative tools. Computers and Education, 138(April), 1–12. https://doi.org/10.1016/j.compedu.2019.04.012
- Jin, B., Kim, J., & Baumgartner, L. M. (2019). Informal Learning of Older Adults in Using Mobile Devices: A Review of the Literature. Adult Education Quarterly, 69(2), 120–141. https://doi.org/10.1177/0741713619834726
- Jones, G. R., Stathokostas, L., Young, B. W., Wister, A. V., Chau, S., Clark, P., ... Nordland, P. (2018). Development of a physical literacy model for older adults A consensus process by the collaborative working group on physical literacy for older Canadians. BMC Geriatrics, 18(1), 1–16. https://doi.org/10.1186/s12877-017-0687-x
- Ladson-Billings, G. (1995). Toward a Theory of Culturally Relevant Pedagogy. American Educational Research Journal, 32(3), 465–491. https://doi.org/10.3102/00028312032003465
- Leyden Academy on Vitality and Aging. (2022). Meaningful Play Overview. Leyden, the Netherlands.
- Lund, R., Christensen, U., Mathisen, J., Sørensen, K., Srivarathan, A., Molbo, D., Halby, K.,
- Kristiansen, M. (2019). Health, well-being and social relations in a changing neighbourhood: protocol for a prospective, multimethods study of the consequences of large structural changes in an ethnic diverse social housing area in Denmark. BMJ Open, 9:e030936. doi: 10.1136/bmjopen-2019-030936
- Pallesen, A. V. J., Byberg, S., & Kristiansen, M. (2019). Improving dietary behavior among ethnic minority women in Denmarks: A feasibility study based on a participatory and culturally adapted intervention. International Journal of Environmental Research and Public Health, 16(5). https://doi.org/10.3390/ijerph16050795
- Romero, M., Hyvonen, P., & Barbera, E. (2012). Creativity in Collaborative Learning across the Life Span. Creative Education, 03(04), 422–429. https://doi.org/10.4236/ce.2012.34066
- Sandholdt, C. T. (2021). Addressing Health in Out-of-School Science Experiences. https://doi.org/10.1007/978-3-030-74266-9_3
- Sandholdt, C. T., Cunningham, J., Westendorp, R. G. J., & Kristiansen, M. (2020). Towards Inclusive Healthcare Delivery: Potentials and Challenges of Human-Centred Design in Health Innovation Processes to Increase Healthy Aging. International Journal of Environmental Research and Public Health, 17. https://doi.org/doi:10.3390/ijerph17124551
- Smith, B. L., & MacGregor, J. T. (1992). Collaboration Learning: A Sourcebook for Higher Education. University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment (NCTLA), 159–189.
- Srivarathan, A., Lund, R., Christensen, U., & Kristiansen, M. (2020). Social relations, community engagement and potentials: A qualitative study exploring resident engagement in a community-based health promotion intervention in a deprived social housing area. International Journal of Environmental Research and Public Health, 17(7), 4–6. https://doi.org/10.3390/ijerph17072341
- Sorensen, K., Van den Broucke, S., Fullam, J. (2012). Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health 12(1), 80.









Literature

- Tews, M. J., Jackson, K., Ramsay, C., & Michel, J. W. (2015). Fun in the College Classroom: Examining Its Nature and Relationship with Student Engagement. College Teaching, 63(1), 16–26. https://doi.org/10.1080/87567555.2014.972318
- Tews, M. J., Michel, J. W., & Noe, R. A. (2017). Does fun promote learning? The relationship between fun in the workplace and informal learning. Journal of Vocational Behavior, 98, 46–55. https://doi.org/10.1016/j.jvb.2016.09.006
- Tørslev, M. K., & Kristiansen, M. (2021). Participatoriske forskningsmetoder. In Forskningsmetoder i folkesundhedsvidenskab (6th ed., pp. 125–153). København: Munksgaard Danmark.
- Wisconsin Department of Public Instruction. (2011). Wisconsin state standards for literacy in all subjects. In Wisconsin's Guiding Principles for Teaching and Learning. Madison, Wisconsin.





