

Sub-study III

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Teacher Students' Designing of Media Education for Older People: Creative and Need-Based Pedagogies Emphasized

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Abstract

This qualitative and deductive study develops Finnish teacher education by exploring the perspectives of teacher students on older people's media education in order to equip teacher students to better support older people's media literacies. To achieve this goal, student teams designed media literacy interventions in the context of a course, "Older People, Media Education, and Facilitation of Learning," which had been developed as part of a previously completed design-based research (DBR) project and was being offered for the first time in separated teacher pedagogical studies at one Finnish university during the academic year 2019–2020. Research participants included 22 teacher students from the piloted course and 15 stakeholders (older people and professionals working with older people), who only participated in the evaluation workshop organized at the end of the course. The research data, collected during the course, consisted of students' designs and presentations on how media education should be implemented for older people, as well as written and oral feedback from stakeholders based on the student presentations. The findings indicate that creative and need-based pedagogies should be emphasized and course development should be continued in light of the results.

Keywords: older people, media literacy, media education, teacher education

Introduction

People over 60 are the largest of all age groups globally (National Institute on Aging & World Health Organization, 2011); however, in the present mediatized and digitalized information environment, this group faces challenges that may arise due to a lack of necessary media literacy to support their learning, well-being, everyday life, and participation in society (see also Rasi et al., 2016). The demographic transformation also presents challenges to media education policies, research, and practices. Media literacy in this article refers to the ability to access and use, understand, critically analyze, and create various media texts and content (Aufderheide, 1993; Ofcom, 2020). Media literacy is the main goal of media education (e.g., Buckingham, 2003), and developing media literacy is a lifelong learning process. Media education should promote media literacies across the life course and life span (Brites et al., 2018; Rasi et al., 2019), and in accordance with lifelong learning, it should acknowledge that "each site of human activity is a place of learning" (Jarvis, 2011, p. 3). The Council of the European Union (2018) has updated key competences for lifelong learning, including media literacy, which are "essential in terms of an individual's self-expression, health, employability and social inclusion" (Salomaa & Palsa, 2019, p. 45). Thus, media education is not only a privilege of the younger generations but also a right and an opportunity for everyone, regardless of age (Petranova, 2013; Rasi et al., 2019).

In a previous study, we conducted a systematic literature review (Rasi et al., 2021) to find out which dimensions of media literacy (use, understand, create) practical media literacy interventions targeted at older people focus on, what kinds of pedagogical approaches have been used to foster media literacy in older people, and what kinds of media literacy intervention

outcomes and practical implications for media education have been reported. For the review, we analyzed 40 scientific journal articles published between 2005 and 2019. The results indicated that the majority of interventions targeted older people's competencies in using digital devices, technologies, and media, for example, for news, health, learning, social interactions, and entertainment (e.g., Abad Alcalá, 2019). The media literacy dimensions of understanding and creating media content received less attention. The pedagogical approaches applied in the interventions were typically based on participants' needs (e.g., Vroman et al., 2015), with strong social support aiming to foster older people's self-efficacy as users of digital technologies and media (e.g., Lam & Lee, 2007). Also, peer-to-peer teaching and intergenerational approaches (e.g., Brown & Strommen, 2018) seem to have particular affordances for older people's media literacy interventions.

The outcomes of media literacy interventions were categorized according to the key areas to which media literacy contributes: 1) democracy, participation, and active citizenship; 2) choice, competitiveness, and the knowledge economy; and 3) lifelong learning, cultural expression, and personal fulfilment (Livingstone et al., 2005). Most of the media literacy interventions reported outcomes related to the third category, such as changes in attitudes, increased ICT skills and e-Health literacy, changes in everyday life, as well as reduced loneliness and social isolation. Outcomes related to democracy, participation, and active citizenship were only rarely reported in the studied interventions, and outcomes related to choice, competitiveness, and the knowledge economy were not reported at all. Regarding future older people's media literacy education, the studies included in the systematic literature review suggested that the interventions should be offered more widely among heterogeneous groups of older people and targeted, for example, at seniors with health problems (Xie, 2011), the oldest-old (over 76 years of age), and minority populations (Bertera, 2014). The present COVID-19 pandemic has also highlighted the media literacy needs of homebound seniors, who are at risk of social isolation (Lee & Kim, 2018). The interventions should cover all three dimensions of media literacy (use, understand, create) and make use of various kinds of pedagogical approaches, such as peer-to-peer teaching (Castilla et al., 2018); intergenerational approaches (Gall, 2014; Tambaum, 2017); the use of compassionate and experienced teachers (Vacek & Rybenská, 2016); collaborative and informal learning environments (Sayago et al., 2013); a supportive, friendly, and respectful learning atmosphere (Chiu et al., 2016; Kim & Merriam, 2010); and holistic teaching approaches tailored to the needs and lives of older people (Berkowsky et al., 2013; Gagliardi et al., 2008).

The aim of our study was to explore teacher students' perspectives on how older people's media education should be implemented and to develop Finnish teacher education so that it better equips students to support the media literacies of older people. At present, Finnish teacher education does not fully correspond to the ideal of continuous and lifelong learning and development (Ministry of Education and Culture, 2019). Nationally, teacher education is mainly focused on younger generations and adults, with little or no content on the learning and teaching of older people (aged 65+) (Lee et al., 2018; Ofcom, 2019a). For example, at one Finnish university, which served as the context for this study, older people's teaching and learning were not part of the 60 European Credit Transfer System (ECTS) separated teacher pedagogical studies before the year 2019. In that year, a new course on older people's media education was added to the curriculum of the adult teacher education program as part of the design-based research (DBR) initiative, of which the study presented here is a part.

Theoretical Framework

Older People's Media Literacy and Media Education

Our study was based on an understanding of media literacy as competence in accessing and using media and creating various media texts and content, as well as understanding and being able to critically evaluate them (Aufderheide, 1993; Ofcom, 2020). Media literacy is also considered the main aim of media education, which “is concerned with teaching and learning *about* the media” (Buckingham, 2003, p. 4) and is seen as a lifelong process (Brites et al., 2018; Rasi et al., 2019). Older people were defined in our study as being chronologically 65 years of age or older (e.g., Lee et al., 2018; Ofcom, 2020). However, following a gerontological understanding, older people were assumed to be a diverse, heterogeneous, and socially differentiated group of people with different life roles, needs, and interests (Edmonson & Scharf, 2015; Rasi et al., 2019; Vidovičová, 2018).

Older people’s levels of media literacy vary and are often inadequate (see Ofcom, 2019a, 2019b; 2020; Rasi et al., 2021; Rasi & Kilpeläinen, 2015). Previous studies also appear to have largely focused on older people’s use of digital media and ICTs, such as the Internet (Vroman et al., 2015). Research on older people’s media literacies is thus insufficient, especially when viewed from the perspective of dimensions of media literacy other than use or when comparing it, for example, with the number of studies targeting younger generations (Petranova, 2013; Rasi et al., 2016). However, it can be stated that the amount of research regarding older people is growing, and these studies also pay attention to media literacy in other dimensions beyond the use of ICTs and digital media (see Eronen et al., 2019; Guess et al., 2019).

Several previous studies have shown the importance of a needs-based approach in supporting older people’s media literacies (see Castro Rojas et al., 2018; Gall, 2014; Sayago et al., 2013; Vroman et al., 2015). Hence, each educational situation is individual and is substantially affected by, for example, an individual’s personality, life history, emotions, devices used, and interests (Gall, 2014; Kim & Merriam, 2010; Petranova, 2013). In addition to the individual and learner-centered approaches, previous studies also emphasized formal and teacher-centered pedagogical approaches (see Brown & Strommen, 2018; Gall, 2014; Rasi et al., 2021; Xie, 2011). For example, collaboration and support between peers, younger generations, family, and experts have been considered significant (Brown & Strommen, 2018; Castro Rojas et al., 2018; Gall 2014; Kim & Merriam, 2010; Livingstone et al., 2005; Rasi & Kilpeläinen, 2015).

Learning about Older People’s Media Education through Design and Stakeholder Collaboration

During the DBR project, a new course titled “Older People, Media Education and Facilitation of Learning” (two ECTS credits) was designed. The design of the course was informed by a systematic literature review of older people’s media literacy interventions (Rasi et al., 2021) and workshops for older people and stakeholders (Rivinen, 2020).

The learning objectives were in line with the revised Bloom’s Taxonomy of Educational Objectives (Anderson & Krathwohl, 2001), where “creating” represents the highest level of the cognitive process and can be realized through generating, planning, and producing. Therefore, teacher students were expected to design and “construct an original product” (Anderson & Krathwohl, 2001, pp. 84–85), that is, a media literacy intervention for older people. Interventions could include courses or short training or tutoring sessions. The key pedagogical rationale for the course was that designing media literacy interventions for older people required teacher students to engage in a rich variety of cognitive processes: remembering, understanding, analyzing, applying, evaluating, and creating. The pedagogical approach also represents an

“authentic pedagogy” that is “true to what-practically-needs-to-be-known in the world, rather than the abstract facts of didactic pedagogy, its academic discipline for discipline’s sake” (Cope & Kalantzis, 2015, p. 10).

The cognitive processes involved in designing are beneficial for learning (Edelson, 2002; Erickson & Lehrer, 1998). Erickson and Lehrer (1998) argued that design problems are typically ill-defined and complex and therefore have the potential to foster higher-order thinking. The teacher students participating in our study needed to begin with a problem analysis and a description of the goals they wanted their design to achieve. This involved reflecting on the challenges, constraints, and opportunities, which potentially fosters higher-order thinking (Erickson & Lehrer, 1998).

Both the teacher education program and the new course followed a blended learning pedagogical design (Boelens et al., 2017; Graham, 2006), which means that the course combined phases of face-to-face and online activities. The course implementation followed the constructive alignment perspective (Biggs & Tang, 2007). A pre-course assignment asked students to describe their preconceptions of older people and the media education targeted at them and set their learning tasks for the course (see Vuojärvi et al., 2021). For their in-course work, the students attended six hours of face-to-face instruction, during which they were briefed on the course topics in detail and presented a design challenge. Students were instructed to design media literacy interventions for older people in teams of three or four students. Teams prepared a written design that described a media literacy intervention and provided theoretical justifications for their choices of pedagogy and content. The teams returned the first version of their design for peer review. Finally, for their post-course assignment, the students reflected on and self-assessed their learning process.

The authenticity of learning (Cope & Kalantzis, 2015) was further promoted through involving stakeholders in the evaluation of the students’ designs. This is also in line with the ongoing discussion of the need for higher education teachers and students to collaborate with multiple stakeholders from outside academia (e.g., Kek & Huijser, 2017). The evaluation phase was carried out as a workshop that was attended by the teacher students, the authors of this article, and 15 stakeholders (four older people aged 74–77 and 11 professionals who work with them). Some of the stakeholders had been participants in previous activities of the project this study was a part of (see Rivinen, 2020). The group of professionals represented two community colleges, two non-governmental organizations, a local library, and a project focused on promoting older people’s digital skills.

In the evaluation workshop, the participants formed six groups, each including two or three older people or professionals and three or four students. Student teams were given 15 minutes to present their design, and after each presentation, the evaluation groups spent 10 minutes assessing it and writing key points on a flip chart. After that, the evaluation groups shared their feedback with the other participants.

Methods

General Design, Research Questions, and Data Collection

Our study was part of a larger DBR project aimed at developing teacher education through designing and piloting a course focusing on older people’s media education (see Rasi et al., 2021; Rivinen, 2020). It examined how the novel course could be further developed. In line with the principles of DBR, older people and other stakeholders participated in the process of

developing the course (Castro Rojas et al., 2018; Lindsay et al., 2012; Tullo et al., 2016; Wang & Hannafin, 2005).

The study sought to answer the following research questions: 1) On what dimension of media literacy did teacher students' designs focus? 2) What kind of pedagogical approaches were used in the students' designs to support the media education of the older people? 3) What should media literacy interventions be like, according to stakeholders' feedback?

The context of the study was described previously. The participants included 22 teacher students (17 females, 5 males), and data were also collected from 15 stakeholders in the evaluation workshop. The dataset consisted of data from four separate research elements, the first of which was nine media literacy interventions designed by the nine student teams and presented in written format (11,226 words). The second element included written feedback (3,008 words) on student presentations from six evaluation groups consisting of stakeholders and also teacher students. The third element was oral feedback from the evaluation groups, which was recorded and transcribed (4,288 words) with the participants' informed consent. The fourth element comprised the students' presentations (PowerPoint, Prezi, videos) of their interventions. However, not all student presentations were included in the study because presentations were requested only after the evaluation workshop, and not all students could be reached again. A total of seven presentations (out of nine) were received. Overall, the study included research data from a variety of sources, which is typical of a DBR project (Collins et al., 2004).

Data Analysis

Our study followed a deductive approach in which the three dimensions of media literacy (use, understanding, and creation of media content) (Aufderheide, 1993; Ofcom, 2020), served as the analytical framework (see also, Rasi et al., 2021; Rivinen, 2020). Content analysis was used to categorize the common and relevant themes related to the research questions (Dinçer, 2018). The first author performed the technical analysis of the data, after which the initial codings were reviewed with the other authors during an online workshop to increase reliability. Based on the analysis, a discussion was held, and modifications were requested and made.

To answer the first research question, all the students' media literacy interventions were exported to NVivo (version 12) analysis software and coded into three dimensions of media literacy. To answer the second research question, the interventions were coded for pedagogical approaches and divided into four upper-level categories: individual and learner-centered, formal and teacher-centered, creative, and blended and online pedagogy. For the last research question, answers were sought from stakeholders' written feedback, which was coded based on the target group of the interventions, providers, pedagogical approaches, and dimensions of media literacy. Finally, the codings were checked against student presentations and the transcriptions of the evaluation groups' oral feedback. It is worth noting here that a unit of analysis could be a sentence or a longer unit. Each unit of analysis could be coded into more than one category.

Findings

Dimensions of Older People's Media Literacy in Teacher Students' Media Literacy Interventions

Six of the media literacy interventions focused mainly on the creative production of media content. Some of the interventions were also coded in other categories, but the emphasis was on the creative process and production. Coded interventions included self-expression and creative media content production in a variety of forms (e.g., blogs, vlogs, photobooks). Depending on the intervention, creative outcomes could be related to older people’s own lives, interests, or, for example, the revival of the Sámi language, as in one intervention. Whereas the primary goal of the seventh NVivo-coded intervention was to understand security and privacy issues better, because a secondary goal was to produce a presentation during the course, for example, through PowerPoint or other means, it was also coded in the creative production category. In all, this category was coded in a total of seven interventions.

Seven interventions were also coded in the “use” category. Two interventions focused mainly on supporting older people in using devices, applications, and/or digital media, whereas in the rest of the interventions, the use of the device was associated with another primary goal. One of these two interventions focused fully on developing skills for the use of social media, but the other also involved features from the “understand” dimension. The other five interventions included features of the “use” dimension to a lesser extent. These interventions provided support for, among other things, using different devices (e.g., tablets, SLR cameras, recording devices) with the goal of producing, for example, a photobook or content on Facebook.

Only one intervention focused mainly on the “understand” dimension, although a total of seven designs were coded in this category. The intervention aimed primarily to increase understanding of privacy and security issues and was called “‘Privacy and Phishing’—Learn about the dangers of the Internet.” Its goal was to teach older people to better understand, for example, how to use the Internet safely, where their information is used, and what rights they have regarding their information. Other interventions coded in this category contained only brief references to the “understand” dimension. However, it was significant that most of the interventions (five out of nine) were interested in security and privacy issues.

Pedagogical Approaches to Support Older People’s Media Education in Teacher Students’ Media Literacy Interventions

Several pedagogical approaches emerged from the media literacy interventions, which were coded into four upper-level categories: individual and learner-centered, formal and teacher-centered, creative, and blended and online pedagogy (see Table 1).

Table 1. Pedagogical approaches based on code classification

<i>Pedagogical approach (N = number of designs)</i>	<i>Clustered category</i>
Need-based (N = 9)	Individual and learner-centered pedagogy
Individual instruction (N = 9)	
Peer-to-peer teaching (N = 8)	
Intergenerational learning (N = 5)	
Experiential learning (N = 3)	
Self-directed (N = 3)	
Critical-emancipatory learning (N = 1)	

Direct instruction (N = 9)	Formal and teacher-centered pedagogy
Collaborative learning (N = 9)	
Task-based learning (N = 6)	
Learning-by-doing (N = 6)	
Observational learning (N = 1)	
Project-based learning (N = 1)	Creative pedagogy
Multimedia production (N = 7)	
Biographical production (N = 2)	
Empowering film pedagogy (N = 1)	Blended and online pedagogy
Blended learning (N = 1)	

Individual and Learner-Centered Pedagogy

Interventions most often followed individual and learner-centered approaches. Such interventions coded into this category were somewhat responsive to older people's needs, interests, experiences, devices used, or goals. The older people were also seen as a heterogeneous group, which is why teaching included features of individual instruction. However, it is also noteworthy that only one of the interventions contained truly one-on-one tutoring, where the support was extended to the home of the older people. As one student team explained:

The digital bus customer could choose the content themes on which the home visits would focus (e.g., six home visits related to online appointment booking). Initially, several instructors would be involved in home visits, after which it would be assessed whether one instructor was sufficient to be responsible for the client's digital teaching. (ST1)

Otherwise, the interventions had, to a lesser extent, features related to individual instruction. Nonetheless, features such as receiving personal feedback, identification of individual skill levels and their consideration in teaching, use of the person's own devices, or, for example, emphasis on the learner's own role in learning were coded as individual instruction.

Eight interventions reported peer-to-peer teaching, which was provided, for example, through discussions, information sharing, peer review, and small group work involving different skill levels. In one intervention, elderly volunteers were used as teachers; otherwise, peer support was received from other participants who took part in the course. In addition, the younger generations could also act as teachers. The following comments reflect how this worked:

The digital bus also employs students in the field who receive credits for the volunteering. (ST1)

We are responsible for teaching the course ourselves. (ST7)

Relatives of the participants can also act as support persons for the older people during the project; if there are devices and people who are well acquainted with the application in the vicinity, they can act as support and inspire communication through the application as well. (ST3)

In two other interventions, intergenerational learning emerged in the sense that participants were themselves perceived to be of different generations of older people, and the definition of “older people” was understood in a broad sense. Also, interventions in which one of the aims was to share information with future generations through social media were coded in this category. One student team wrote:

The idea is that an older person could become emancipated and find a suitable way to use social media and share the valuable knowledge and skills they possess with posterity or people interested in the same things. (ST4)

Only a few references to experiential learning, self-directed, and critical-emancipatory learning were found. Experiential learning was understood in our study to be based on the participant’s own experience and ability to evaluate and develop their experiences. In addition, self-directed learning emerged, for example, when support was provided in the older person’s home according to his or her own needs and goals. Only one intervention used the critical-emancipatory learning approach, which aimed to encourage participants to believe in their own abilities and to inspire them to share their knowledge and skills or engage in, for example, social discussion on the Internet.

Formal and Teacher-Centered Pedagogy

This category included interventions in which the course was organized, for example, by one or more experienced teachers (e.g., teacher of liberal education, teacher with experience in media and adult education), courses were of a fixed-length (e.g., six sessions, one to two hours at a time), or teaching that resembled classroom-like settings (e.g., classroom with Internet access and video projector, lectures). In addition, a total of seven interventions reported cooperative learning approaches, but at the end of the analysis, all the interventions were included in the collaborative learning category.

Six interventions had features of learning-by-doing and task-based learning (e.g., homework, group assignments). As stated in the two interventions, doing is an important part of concretizing learning and teaching. In addition, teaching was usually implemented in small groups (e.g., three to five), and only one intervention explicitly mentioned the possibility of one-on-one tutoring. However, even in that situation, it was possible to take part in group work and have discussions with other participants on a digital bus. Observational and project-based learning were named only once as pedagogical approaches.

Creative Pedagogy

The third category included interventions with features of the creative process or production. A total of seven interventions reported on multimedia production that used vlogs, blogs, videos, photos, social media, narratives, PowerPoints, other forms of presentation, movies, photobooks, or other recordings. Two of these focused mainly on depicting the participants’ own life histories and experiences. Two of the student teams explained:

The course teaches you to share possible content about your own life, the history of life from your own perspective in the form of pictures, stories or other recordings, hobbies, current affairs, or other personal interests and opinions on the Internet. (ST4)

As a final output, older people compiled their own picture book from old photographs, through which they opened to other members of the group the different stages of their life course and looked at the past as part of the age stage. (ST8)

In addition, one of the interventions was based on an empowering film pedagogy. The goal was to develop an audiovisual production, alone, or together with others, about something that was meaningful to the participant. At the end of the one-year course, the productions would be viewed and certificates distributed.

Blended and Online Pedagogy

Only one intervention was coded in this category. It utilized the rhythm of the blended learning approach that combines face-to-face and distance work (Boelens et al., 2017). The coded intervention combined two contact teaching days (a total of eight hours) with a week of independent work on a social media platform. During the week, participants could keep in touch with participants and teachers via Facebook.

What Should Media Literacy Interventions Be Like According to Stakeholder Feedback?

Attention was meant to be paid to, for example, expanding the target group, although the interventions were generally perceived to be good and feasible. Three of the feedback comments considered that interventions could be extended to people of all ages, two to other languages, and two to other groups in general. In addition, the following groups received one feedback comment: people who provide support for older people; those who do not like writing; those in formal higher education (e.g., university, the University of Applied Sciences); grandchildren; those with certain skill levels; those of all skill levels; and those who are retiring, are outside the target group delimitation, are disabled, or are lonely.

In addition, in light of the feedback, the number of parties that provide support should be increased, and cooperation between different parties should be further emphasized. For example, based on three feedback comments, support could also be provided on behalf of libraries, projects, and traditional training organizations, and two feedback comments were concerned with concrete places (e.g., digital points). The following providers were mentioned only once in the feedback: family, support persons, organizations, and another service bus, for example, a social services bus.

Individual and learner-centered pedagogy received feedback mainly from need-based and individual approaches, which were coded 16–17 times in the feedback. Intergenerational learning was mentioned in the feedback a total of eight times, and peer-to-peer teaching was mentioned three times. Self-directed and one-on-one approaches received only one feedback comment. These results further suggested the need to emphasize the individuality and needs of older people even more. Two evaluation groups offered the following suggestions:

The course should be conducted with your own devices because the use of new or other devices is difficult to learn again and again. (EG4)

Studying in a group may be a little distracting, more individual support [is necessary]. (EG6)

The following approaches were coded into formal and teacher-centered pedagogy: direct instruction, community, feedback and evaluation, task-based, learning-by-doing,

workshops, scaffolding, and panel discussion. Overall, direct instruction received the most feedback, followed by community, as well as feedback and evaluation. Other approaches were mentioned only once or twice. The majority of the comments focused on the duration of the intervention; in most of the interventions, the schedules could be condensed and divided into, for example, several course implementations. In addition, creative pedagogy was coded in a total of seven feedback comments related to multimedia production. Only one comment, concerning the implementation of the online course, was coded into blended and online pedagogy.

Other important issues were also highlighted in the feedback, such as feelings (eight feedback comments), as well as material and devices (six feedback comments). For example, feelings mostly referred to the emergence of fears and the importance of addressing them. Moreover, five comments were concerned with the themes of “one thing at a time” and “context.” According to the results, attention should also be paid to the learning environment (e.g., ergonomics) and the pace of the teaching. Continuity, concreteness, hobby-like, and ease of use of programs received four or fewer comments.

Finally, according to the feedback, older people mostly needed support in *using* social media and devices and in *creatively* producing media content. Ten feedback comments were concerned with the “understand” dimension. Based on feedback, interventions could be, for example, combined or divided into separate entities or have certain features added to them. One evaluation group wrote:

It would also be important to teach you where to find vlogs or blogs if filming your own life isn't inspiring. (EG4)

Discussion and Conclusions

Our research, especially from the perspective of teacher students, has provided information for future development of the piloted course. The results indicate that the media literacy interventions designed by teacher students focused on training and support with regard to all dimensions of media literacy (Aufderheide, 1993; Ofcom, 2020); however, the “create” dimension was clearly emphasized more than the others. A total of six interventions out of nine focused mainly on supporting older people’s creative production. As the difference from other dimensions was so significant, it can be argued that the introductory parts of the course and the supplementary materials should place more emphasis on “creative production” rather than on the “use” and “understand” dimensions, and for this reason, future course implementations should pay more attention to these dimensions and add additional materials. Future course implementations could also consider whether it would make sense for students to predetermine the dimensions of media literacy on which the course design should focus. In the implementation of the piloted course, students were free to choose the media literacy dimension with which the course design was mainly related.

Interventions emphasized mostly individual and learner-centered as well as formal and teacher-centered pedagogies (see Gall, 2014; Rasi et al., 2021; Xie, 2011). In the interventions, the older people were perceived as a heterogeneous group, whose own interests, needs, goals, devices used, and skill levels, for example, should be taken into account when designing and implementing media education (Gall, 2014; Patrício & Osório, 2016; Sayago et al., 2013; Vroman et al., 2015). Instructors were usually one or more knowledgeable teachers, but support was also obtained from peers (see Kim & Merriam, 2010; Sayago et al., 2013). The importance of peer support was emphasized in almost all interventions. The interventions also reflected the

pedagogy of creative production, as well as blended and online pedagogy, but to a lesser extent. For example, teaching that took place entirely online was not found, and approaches of blended learning were used in only one intervention. In addition, pedagogical approaches drawing on playfulness and game-based learning, for example, were missing (see Charlier et al., 2012; Kangas, 2010). It is also noteworthy that one-on-one tutoring was used in only one intervention (see Gall, 2014). The above considerations are important for the implementation of the next course and should be taken into account when planning course content.

Involving stakeholders in course implementation through an evaluation workshop was relevant for the course and the research, as it brought it closer to the authentic world (Cope & Kalantzis, 2015; Kek & Huijser, 2017; Wang & Hannafin, 2005). The evaluation workshop enabled information sharing, networking, and feedback from stakeholders. Based on the feedback, stakeholders understood older people as a diverse group to whom the course should also respond. Older people should be understood as people who may also have various cognitive and physical difficulties as they age (Lee et al., 2018) and whose interests can change (Rasi et al., 2019). In addition, they may play several roles in society, such as retirees, parents, and consumers (Vidovićová, 2018).

In the future, it would be ideal to continue this approach and possibly consider extending it. For example, if it were possible for students to carry out an internship with the older people on the basis of their media literacy interventions, it would add even more value to the topic and the course. However, putting the students' interventions into practice would require further development of the curriculum. Also, if students consulted older people before designing their interventions, the design might be more suitable. In spite of everything, more course development and research on the topic are needed in order for them to be properly embedded in teacher education.

Limitations

The number of older people in the study could have been higher, and interviews with students and stakeholders could have been considered more thoroughly. It should also be noted that stakeholders provided feedback based on student presentations and had not seen the written design. In addition, not all students returned their presentations, and therefore, additional inspections could not be carried out for all works.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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