

What can co-design contribute to social work with groups?

Raquel Pelta¹ and Antonio López Peláez²

Abstract: *In this article, we present the basic features of co-design methodology and its application to group dynamics with the aim of broadening the theoretical debate in the field of social work with groups. In both self-help and goal-oriented groups, the group design and communication dynamics that emerge from within it are key elements to ensure their correct functioning and effectiveness. To this end, we propose ten recommendations for implementing co-design that could be useful in direct social work practice.*

Keywords: *co-design; social design; social work with groups; group dynamics; groupwork*

1. *Researcher in training, Doctoral Program in Law and Social Sciences. International School of Doctorate, UNED, University of Barcelona*

2. *Professor of Social Work and Social Services, Department of Social Work, Faculty of Law, UNED (Spain)*

Address for correspondence: *rpelta1@alumno.uned.es, alopez@der.uned.es*

Date of first (online) publication:

Introduction

Social work with groups has become a poly-paradigmatic specialisation in the field of direct social work practice. Groupwork brings together approaches and theories that enable professionals to analyse, design, and evaluate effective group dynamics to achieve previously defined objectives (López Peláez, 2015). Consequently, the relationship between social worker and service user needs to be recalibrated to take into account users' autonomy and maturity, and the fact that they are fellow citizens with full rights under law. Indeed, citizens' needs, preferences, and perspectives should be given priority in the client-provider relationship (Bunn and Marsh, 2019). Given that users and experts, citizens and social workers, all look at participation methodologies from different perspectives, there needs to be a balance of agency from the initial diagnosis stage to ensure 'equitable arrangements' (Thorpe and Gamman, 2011). In relation to this, social workers now have access to an increasing number of projects that are incorporating co-design methodologies in social intervention projects.

Social design is a design approach that seeks to address societal issues. It involves the application of design-based principles and practices for the analysis of social reality (Siu and Wong, 2019). The objective of social design is to find new and better solutions for diagnosing, intervening in, and evaluating social problems, whatever they may be. Design for social innovation 'refers to a vast field resulting from the intersection of the entire range of social innovation phenomena [...] with expert design in all its contemporary shapes and forms' (Manzini, 2015, p.63). Furthermore, social design and innovation are moving closer to social work, to the point of forming interdisciplinary teams aimed at making greater progress in solving social problems, which highlights the positive contribution of co-design in stimulating social innovation (Selloni and Corubolo, 2017).

In this article, we analyse contributions of co-design that could be applied to group dynamics. This interdisciplinary focus combining co-design and social work with groups enables us to widen the debate on group dynamics and enter into dialogue with other theoretical approaches such as the ecological/systems and empowerment-based perspectives (Garvin, Gutiérrez and Galinsky, 2004). In particular, we examine some of the co-design methods that provide specific

benefits to group dynamics. Lastly, we propose ten recommendations for using co-design to improve social workers' social interventions with groups.

Co-design and group dynamics

Co-design is an approach – and a working methodology – that focuses on design processes and procedures (design thinking). It is considered a particularly suitable method for tackling complex social problems and providing innovative solutions through techniques that involve people who are directly affected by design decisions, and know and understand the problems first-hand in a comprehensive and profound way (Blomkamp, 2018; Bradwell and Marr, 2008; Burkett, 2012; Cook, 2011; Sanders and Stappers, 2008). All parties concerned are involved both in the process of defining the issues in question and finding solutions. In this regard, co-design is a creative approach in which mutual learning and understanding of the other are fundamental; a premise that lies at the heart of social work practice.

For these reasons, we believe that co-design is a useful methodology that could expand on the methods already applied in social work with groups and more specifically with self-help and goal-oriented groups. According to Cristina de Robertis and Henri Pascal (2007), the techniques employed in social work with groups should not be regarded as a constraint, but rather as a tool within an intervention strategy that pursues social change. If adequately applied, co-design methods could help to achieve this change in social work with groups. Moreover, when applied to group dynamics, co-design could be an appropriate tool to help groups achieve their objectives.

Definition and characteristics of co-design

Co-design is a democratic approach (Sanders and Stappers, 2008) based on cooperation, social interaction, and equal power relations. It is a creative process that requires constant reflection on the actions proposed (Schön, 1983) throughout the stages of the process – from its inception when problems are analysed and prototypes are built, to the testing of ideas, adjustment, and the final evaluation. The methodology aims to foster collaboration and interaction among group members,

and decisions are only made after setting shared goals and conducting open discussions.

In the course of working with stakeholders and practitioners from other fields, it involves developing ‘a shared mental model (Jones et al, 2011; Ozesmi et al, 2004; Morgan et al, 2002; Langan-Fox et al, 2001) to provide a mechanism by which new information is filtered, stored and used to reach common goals’ (Irbite, 2014, p.417). Designers play the role of facilitators, creating the proper climate for people to relate to each other, communicate, be creative, and share ideas.

The principal characteristics of co-design methodology are as follows (Blomkamp, 2018):

- *Co-design is a design-led process.*
The models used involve iteration. One of the most well-known models is the Double Diamond model (Design Council, 2015).
- *Co-design follows the principles of participatory design*
People are creative and experts in their own experiences and have ‘the capacity to participate in and direct change in their lives’ (Burkett, 2012, p.8).
- *Co-design uses visual and tangible tools to access, generate, and test experiences and ideas.*
There are three types of techniques for co-design: telling, enacting, and making. These techniques are used to generate and test ideas relatively quickly and uncover non-verbal, non-linear, intuitive, and emotional knowledge.

Bradwell and Marr (2008, p.17) argued that co-design ‘shifts power to the process, creating a framework that defines and maintains the necessary balance of rights and freedoms between participants’. According to Iedema et al. (2010), co-design is a deliberative and reflexive process for the creation of a dialogical research methodology, from which practical solutions can emerge. It is intersubjective and generates locally validated and valued ways of structuring reality. Given its interactive and interpersonal nature, it brings people together to create negotiating dynamics between them. This forges new commitments and new discourse that span socio-cultural and professional relationships as well as personal boundaries. The locus of power is not determined beforehand, but rather is developed and achieved by all.

In this regard, the co-design approach and social work with groups share many elements in common. For example, the techniques used in social work with groups aim to create a common feeling, teach active thinking, develop capacities for cooperation, exchange, responsibility and autonomy, and foster a positive attitude towards relational problems, thus favouring the adaptation or social transformation of the person and the group (Fernández García and López Peláez, 2006, p.260); objectives that are also fundamental to co-design processes.

Since the early 2000s, several studies have examined the application of co-design in fields such as health (Boyd, Mckernon and Old, 2012), education (Garcia et al, 2014; Pelta, 2020), social integration policies (Cumbula, Sabiescu and Cantoni, 2017), and citizen participation (Cantú and Selloni, 2013), among others.

How can co-design contribute to enhancing group dynamics?

Communication is an essential element in all stages of social work with groups: from the very beginning, when the social worker has to explain the group tasks and objectives, create an environment of trust, promote cohesion and joint collaboration, and encourage the active participation of all members, to the final stage when the group is dissolved, which should be as positive and non-traumatic as possible.

More specifically, during the self-regulation process to ensure the correct functioning of the group, conflicts may arise between the members due to communication problems. This is a significant factor in differentiating mature from immature groups. As Villegas-Castrillo (1993, pp.124-125) argued, the poverty of communication and organisation in immature groups is evident, as well as the lack of clarity of roles and goals, all of which leads to insufficient cohesion and lack of participation. In mature groups, the situation is different. There is a favourable climate for the expression of feelings and opinions, aims and objectives are stated more explicitly, and the integration of individual values and goals with those specific to the group is facilitated, which encourages active participation in common responsibilities.

Although social work with groups employs its own methods, techniques, and approaches, co-design can contribute to improving communication processes in group dynamics. One of the reasons

is that the designer must begin by communicating the actions to be performed according to the 'designed affordances', using no other medium than the design itself (Norman, 2019).

Designers habitually structure and order information to make messages understandable by means of graphic models and codes, images, sketches, and diagrams that 'are aids to internal thinking as well as aids to communicating ideas and instructions to others' (Cross, 2006, p. 11; Everling et al, 2018, p. 179). In co-design processes, designers are concerned not only with facilitating group dynamics, but also with creating tools for expression, visualisation, and ideation that help group members to generate concepts, better manage their perceptions, and reach a reasonable consensus.

Applied to social work with groups, the co-design methodology shapes ideas (for example, through prototypes and drawings) which, in turn, promote dialogue and interaction. As a result, people are better able to express themselves and share their interests, concerns, and feelings.

Co-design can also help people become more aware of their creative capacity (understood as a means of problem solving and decision making). The premise is that all people are creative, even if they do not consider themselves to be. Indeed, as Sanders and Stappers (2012, p.15) pointed out, 'since many adults in our society don't engage in creative activities regularly, they may not see themselves as being creative'.

Creativity (individual or collective) is a broad concept that is difficult to define. However, when defining social intervention processes from the perspective of co-design, it is understood as a process that makes people sensitive to problems, deficiencies, cracks or gaps in knowledge and leads them to identify difficulties, seek solutions, make speculations or formulate hypotheses, approve and check these hypotheses, modify them if necessary, and communicate the results (Torrance, 1965 cited in Esquivias, 2004, p.5).

The awareness of problems, but also the capacity to seek solutions, is part of the empowerment process that is stimulated by social work with groups. and is inherent in co-design given that it is a creative process per se that, 'can put everyone on the same playing field and support a shared language, and you have a design space that supports the exploration of new ideas, even in wicked problem situations' (Sanders and Stappers, 2012, p.23).

In relation to creativity, understood as the ability to identify problems and seek solutions, it should be remembered that social intervention projects based on the contributions of art are nothing new (Shenaar-Golan and Walter, 2018), but already form part of the dynamics characteristic of social work with groups (Kelly and Doherty, 2016). Although the same cannot be said of design, over the last two decades co-design has begun to be used in the 'social' sphere.

Whether it be art or design (through co-design), what promotes creative approaches are relationships between people and the fact that they help build frameworks of interaction that benefit the participants and the community in which they are embedded (Ricart and Saurí, 2009).

While creativity plays a fundamental role in co-design, it is just one of a number of features within a process that comprises other elements of equal importance, such as participation, empowerment, relations and interactions, visibility, recognition, and dialogue, among others. With regard to artistic projects, which we believe are also applicable to co-design, Ricart and Saurí (2009, pp.14-18) highlighted that they provide participants with a series of benefits as follows:

- Visibility and recognition. Changing the way certain groups are perceived, making them more visible, and facilitating reconciliation and recognition.
- Opportunities. Building bridges between people and institutions and offering alternatives to their situation.
- Relations and interactions. Creating networks and encouraging interaction between the stakeholders involved. Shared tasks provide a basis for strengthening relationships between group members and their community.
- Understanding and communication. Providing new ways of understanding, of relating to the environment, and learning new means of expression and communication that help to modify established discourses.
- Emotions. Working with emotions can contribute to improved self-esteem, recognition, and social impact in the community.
- Empowerment. Promoting personal and social transformation through change, making it possible 'to move from developing a passive role as spectator to becoming involved stakeholders who

produce and express diverse opinions and points of view' (Ricart and Saurí, 2000, p.17).

Although designers are accustomed to providing concrete solutions, through co-design they can provide a method and tools that facilitate the involvement of group members in developing and testing new solutions that can be adapted to their actions and context. This is applicable to social work with groups in general and goal-oriented and self-help groups in particular. As Britton (2017, pp.41-42) states, co-design 'goes beyond the anodyne ideal of collaboration: it is something that deals with the development of intention and the establishment of relationships that form a foundation to meet future challenges'.

But what are the methods, techniques, and tools of co-design and how can they be applied to social work with groups? When classifying the stages in a group's lifecycle, although there is consensus regarding the three fundamental stages (initial stage, intermediate stage, and final stage), there are also some notable exceptions, such as the three stages in Northen's model (1969) or the seven stages in Sarri and Galinski's model (1985, pp.72-77). Taking as a reference the five stages of social work with groups proposed by López Peláez's (2015), what follows are details of some basic co-design techniques (Cook, 2011; Develop Impact & You (DIY/NESTA), n.d.); Kimbell, 2014; Kimbell and Julier, 2012; IDEO, 2009; Service Design Tools, 2020; NESTA, 2020) applied to group dynamics:

First stage: Design, diagnosis, and preparation

Objectives

- Assess problems effectively.
- Determine goals or achievements.
- Accomplish suitable group composition.
- Schedule groupwork.

Co-design techniques

- Self-reflection.
- Create a storyworld.
- Find out something unexpected.
- Persona method.

Outcomes

- Identification of motivations, expectations, and goals of potential group members.
- Support recruitment of group members.

Second stage: Initial stage of the group; inclusion and orientation

Objectives

- Achieve a climate of trust.
- Introduce group members correctly.
- Set objectives, purposes, and goals.
- Establish confidentiality of information exchanged in the group.
- Develop standards.
- Define and adjust the role of the social worker.

Co-design techniques

- Identify topics.
- Visualise the drivers of change.
- Define problems/proposals.
- Share stories.
- Create areas of opportunity.

Outcomes

- Clear definition of objectives and goals.
- Reinforced interactions, exchange of information and points of view.

Third stage: transition

Objectives

- Reassess and strengthen the purpose of the group.
- Increase the level of group trust.
- Strengthen group cohesion.
- Clarify rules.
- Address group fears and resistance.

Co-design techniques

- User experience map or customer journey map.
- Empathy map.

Outcomes

- Greater knowledge of what people feel and their actions.
- Group members understand others better.
- Dialogue strengthens group cohesion.

Fourth stage: Work and correspondence stage. Achievement of goals

Objectives

- Structure the working group.
- Support each person to progress resolutely and actively.
- Increase the degree of power of group members.
- Achieve a higher level of group cohesion and trust.
- Achieve the established goals. Increase the social competence of group members.
- Assess group process and progress and the evolution of each participant.

Co-design techniques

- Prototyping.

Outcomes

- Improved decision making.
- Strengthened communication and increased social competence of group members.

Fifth stage: final stage. Disengagement of participants from the group

Objectives

- Monitor the reactions of the participants in relation to their disengagement from the group.
- Manage emotional reactions effectively.
- Evaluate the group and its achievement of the proposed goals exhaustively.
- Integrate and interpret the group experience.
- Address unfinished and unresolved questions and establish a

strategy to deal with them.

- Analyse the activity of the social worker and group members.
- Promote sustained, long-term improvement and strengthen the goals achieved.

Co-design techniques

- Develop a framework for future outcomes.

Outcomes

- Definition of evidence to be used to evaluate the process.
- Better understanding of how to assess future changes.
- Strengthening of the goals achieved.

Practice-based experience: co-design techniques and tools in the initial stage of group dynamics

The initial stage of co-design is key to ensuring the viability of group dynamics (without a good initial approach, the group will not endure). In the first stage, among other tasks, the social worker must identify the needs of potential group members, select the type of group, plan the recruitment process and recruit members, and assess and prepare them for the groupwork. In other words, the aim is to foster self-reflection and the ability to become aware of one's own and other people's reality. The results of both online and face-to-face group dynamics (Castillo de Mesa et al, 2020; Gómez Ciriano and López Peláez, 2019) have shown that co-design tools can aid social workers in assessing the environment (and each group member), diagnose situations, establish the group objectives, analyse the social skills of the participants to ascertain their suitability, and determine the group composition. To achieve this, co-design provides tools such as self-reflection, storyworld, find out something unexpected, and the persona method, among others.

In our practical experience, we have seen how creativity goes hand in hand with reflexivity and the ability to examine our environment in creative and unexpected ways. In what follows, we provide a brief description of four tools used in co-design processes: self-reflection, storyworlds, find out something unexpected, and the persona method.

Self-reflection

Lucy Kimbell (2014) recommends doing a self-reflection activity prior to the co-design process so that designers gain insight into their own capacities, values, and accountabilities, as she understands that design has a social impact and the designer, like any other human being, is not neutral.

The activity Kimbell proposes can also be appropriate for social workers in their own process of self-analysis, as it makes the process more systematic. In this regard, it is important to underline the need for self-analysis in social work practice. Social workers have an ethical commitment to their users. However, it is unquestionable that they interact with them through the lens of their own personal values and experiences, and they must be aware of this. For example, the very selection of group participants may be influenced by the social worker's prejudices and biases; thus the importance of self-reflection and the use of techniques and tools to facilitate it.

The activity consists of a brief exercise that facilitates reflection on issues and challenges, vision and values, weak and strong ties, capacities and resources, among other aspects.

Create a storyworld

Storyworlds help to reveal the details of peoples' lives and understand their world of relationships with other people, places, and things. They encourage the creative thinking needed to produce new ideas.

Kimbell and Julier (2012, p. 23) suggest two ways in which a storyworld can be used. Firstly, it can be used as a research tool to structure an interview, since this method brings to light different aspects of a person's life and world. Storyworlds can also be used as a workshop activity in small groups to build a picture of a persona and his or her world. For this purpose, different sections of a template (Development Impact & You/Nesta, n.d, pp.63-67) are completed to put down ideas in writing and draw a picture of the persona on a large sheet of paper, including essential data to develop the persona.

Find out something unexpected

Although inspired by ethnographic methods, this method is useful

when ethnographic research cannot be performed as it allows information to be obtained fairly quickly (Kimbell and Julier, 2012; Kimbell, 2014).

Among other actions, people are asked to take photos or record videos of things they are drawn to and share them with the researcher (or team). Photo and video diaries collect visually rich information about people's lived experiences.

For social workers, this method can be useful in projects that involve proposing or improving a service. With a view to interventions, it can also provide useful insight into the group members' daily lives in their own surroundings.

Personas method

The personas method consists in the creation of fictional characters based on real life observations of archetypical users with specific needs and objectives (Pérez-Montoro and Codina, 2017; Kimbell, 2014; Nielsen, Storgaard, Stage and Billestrup, 2015; Grudin and Pruitt, 2002).

A document is drafted using real data collected from previous research. Based on the data, the main characteristics of the persona are described, as well as the character's objectives, roles, behaviour, physical attributes, abilities, needs, and preferences. Significant and credible details are chosen to ensure the persona is as similar to a typical person as possible. A template can also be used for this purpose (Development Impact & You/Nesta, n.d, pp.74-76).

The persona method helps to identify the motivations, expectations, and goals of potential group members. It can also be used as a support tool when selecting members.

Conclusion: Ten recommendations for using co-design in social work with groups

In democratic societies, social inclusion requires the participation of users and the involvement of all stakeholders, with a clear strategy aimed at engagement and the achievement of goals. In our view, the co-design approach enhances group management, heightens user

awareness, and promotes behavioural change.

We propose ten recommendations for implementing a co-design approach that could be useful in social work with groups; especially in settings where the superdiverse and interdisciplinary nature of the working groups requires greater flexibility in dialogue with other disciplines:

1. Integrate designers in the working group and build trusting relationships with them. They will provide new perspectives on group dynamics.
2. Ensure that the people who participate in the process do so with a cooperative mindset and a participatory spirit.
3. Create shared expectations so that all participants feel accountable for and work towards change.
4. Recognise the importance of lived experiences and create a group context in which lived experiences are valuable and equal to other types of knowledge.
5. Involve and build a team with people to define the problem and the opportunities.
6. Combine co-design techniques and tools to boost creativity and achieve long-term improvements.
7. Explain the process and make sure everyone understands the what, the why, and the how of the co-design techniques and tools they will be using.
8. Facilitate dialogue on shared values and use co-design techniques to achieve consensus and support relational changes.
9. Review the progress of the group periodically and make the outcomes explicit. Lack of awareness about the progress made can be discouraging and reduce group commitment.
10. Co-design techniques and tools are not a formula. Create your own or adapt existing ones, but bear in mind that it is important to use artefacts that help to visualise ideas and trigger the creative process.

References

Blomkamp, E. (2018) *The Promise of Co-Design for Public Policy*. *Australian*

- Journal of Public Administration*, 77, 4, 729-743 [Accessed 26th August 2021 at <https://doi.org/10.1111/1467-8500.12310>]
- Boyd, H., Mckernon, S. & Old, A. (2010) *Health Service Co-design. Working with patients to improve healthcare services*. Auckland: Waitemata District Health Board
- Bradwell, P. & Marr, S. (2008) *Making the most of collaboration: an international survey of public service co-design. Demos Report 23*. Londres: Demos. [Accessed 4 December 2020 at <https://www.demos.co.uk/files/File/CollabWeb.pdf>]
- Britton, G. (2017) *Co-design and Social Innovation: Connections, Tensions and Opportunities*. New York: Taylor & Francis
- Bunn, M. & Marsh, J. (2019) Science and Social Work Practice: Client-Provider Relationships as an Active Ingredient Promoting Client Change. in J. Brekke, J. Anastas, (eds.) *Shaping a Science of Social Work. Professional Knowledge and Identity*. New York: Oxford University Press (pp. 149-175)
- Burkett, I. (2012) An Introduction to Co-design. *Knode*. [Accessed 4 December 2020 at <https://www.yacwa.org.au/wp-content/uploads/2016/09/An-Introduction-to-Co-Design-by-Ingrid-Burkett.pdf>]
- Cantù D. & Selloni, D. (2013) From engaging to empowering people: a set of co-design experiments with a service design perspective. *Social frontiers: the next edge of social innovation research. Research papers for a major new international social research conference*. London: NESTA. [Accessed 18 March 2020 at <https://www.nesta.org.uk/event/social-frontiers/>]
- Castillo de Mesa, J., Gómez-Jacinto, L., López Pelaéz, A. & Erro-Garcés, A. (2020) Social Networking Sites and Youth Transition: The Use of Facebook and Personal Well-Being of Social Work Young Graduates. *Front. Psychol.*, 18 February 2020. [Accessed at 26th August 2021 at <https://doi.org/10.3389/fpsyg.2020.00230>]
- Cook, M.R. (2011) *The Emergence and Practice of Co-Design as a Method for Social Sustainability Under New Labour*. PhD Thesis. London: University of East London. [Accessed 15 October 2020 at <https://repository.uel.ac.uk/item/85xq8>]
- Cross, N. (2006) *Designerly Ways of Knowing*. London: Springer
- Cumbula, S.D., Sabiescu, A. & Cantoni, L. (2017) Community design: a collaborative approach for social integration. *The Journal of Community Informatics*, 13, 1, 177—192 [Accessed 26th August 2021 at <https://doi.org/10.15353/joci.v13i1.3299>]
- De Robertis, C. & Pascal, H. (2007) *La intervención colectiva en Trabajo Social. La acción con grupos y comunidades*. Buenos Aires: Lumen Humanitas
- Design Council (2015) *The Design Process: What is the Framework for*

- innovation? Design Council's evolved Double Diamond. *Design Council*. [Accessed 19 March 2020 at <https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>]
- Development Impact & You/Nesta (n.d.). Practical Tools to Trigger & Support Social Innovation. *Designtoolkit.org*. London: Nesta. [Accessed 22 September 2020 at <https://diytoolkit.org/media/DIY-Toolkit-Full-Download-A4-Size.pdf>]
- Esquivias, M.T. (2004) Creatividad: definiciones, antecedentes y aportaciones. *Revista Digital Universitaria*, 5, 1, 1-17 [Accessed 15 September 2020 at http://www.revista.unam.mx/vol.5/num1/art4/ene_art4.pdf]
- Everling, M., Theis, M.R., Santos, F.M., Cecyn, L.C.C., Rodrigues, R. & Lafront, R. (2018) Design, Participação e Engajamento Como Estratégias para Qualificar Relações de Uso em Abordagens de Design no Âmbito do Projeto ETHOS. *GAMPI Plural* 17. São Paulo: Blucher (pp. 178-192) [Accessed 26th August 2021 at <https://doi.org/10.5151/gampi2017-16>]
- Fernández García, T. & López Peláez, A. (2006) *Trabajo Social Con Grupos*. Madrid: Alianza Editorial
- Garcia, I., Barberà, E. Gros, B., Escofet, A., Fuertes, M., Noguera, I., ... & Marimón, M. (2014) Analysing and supporting the process of co-designing inquiry-based and technology-enhanced learning scenarios in higher education. in S. Bayne, C. Jones, C., M. de Laat, T. Rybert, & C. Sinclair, (eds) *Proceedings of the 9th International Conference on Networked Learning*. Edinburgh: John McIntyre Conference Centre, University of Edinburgh (pp. 493-501) [Accessed 22 October 2020 at <https://www.lancaster.ac.uk/fss/organisations/netlc/past/nlc2014/abstracts/pdf/garcia.pdf>]
- Garvin, C.D., Gutiérrez, L.M. & Galinsky, M.J. (eds.) (2004) *Handbook of Social Work with Groups*. New York: The Guilford Press
- Gómez Ciriano, E.J. & López Peláez, A. (2018) Trabajo Social, interculturalidad e intervención social. in E. Pastor Seller, M. L. Cabello Garza, (eds.). *Retos y desafíos del trabajo social en el siglo XXI: Una perspectiva internacional comparada México-España*. Madrid: Dykinson (pp. 135-146)
- Grudin, J. & Pruitt, J. (2002) Personas, participatory design and product development: an infrastructure for engagement. in T. Binder, J. Gregory, & I. Wagner (eds.) *Proceedings of the 7th Biennial Participatory Design Conference 2002*. Malmö, Sweden: Computer Professionals for Social Responsibility (pp. 144-152). [Accessed 22 October 2020 at <https://ojs.ruc.dk/index.php/pdc/article/view/249>]
- IDEO. (2015) *Human Centered Design*. New York: IDEO. 2nd edition. [Accessed

- 15 September 2020 at <https://www.ideo.com/post/design-kit>
- Iedema, R., Merrick, E., Piper, D., Britton, K., Gray, J., Verman, R. & Manning, N. (2010) Codesigning as a Discursive Services: The Architecture of Deliberation. *The Journal of Applied Behavioural Science*, 46, 1, 73-91 [Accessed 26th August 2021 at <https://doi.org/10.1177/0021886309357544>]
- Irbite, A. (2014) The importance of the paradigm shift in the development of Design industry and Design education. *Society Integration Education. Proceedings of the International Scientific Conference*, 2 (pp. 411-422) [Accessed 26th August 2021 at <https://doi.org/10.17770/sie2014vol2.636>]
- Jones, N. A., Ross, H., Lynam T., Perez, P. & Leitch, A. (2011) Mental models: an interdisciplinary synthesis of theory and methods. *Ecology and Society* 16, 1, 46 [online] [Accessed 18 March 2021 at <http://www.ecologyandsociety.org/vol16/iss1/art46/>].
- Kelly, B. & Doherty, L. (2016) Exploring Nondeliberative Practice through Recreational, Art, and Music-Based Activities in Social Work with Groups. *Social Work with Groups*, 39, 2-3, 221-233 [Accessed 26th August 2021 at <https://doi.org/10.17770/sie2014vol2.636>]
- Kimbell, L. (2014) *The Service Innovation Handbook. Action-oriented creative thinking toolkit for service organizations*. Amsterdam: Bis Publishers
- Kimbell, L. & Julier, J. (2012) *The Social Design Methods Menu*. [Accessed 20 September 2020 at http://www.lucykimbell.com/stuff/Fieldstudio_SocialDesignMethodsMenu.pdf]
- Langan-Fox, J., Wirth, A., Code, S. Langfield-Smith, K. A. & Wirth, A. (2001) Analyzing shared and team mental models. *International Journal of Industrial Ergonomics*, 28, 2, 99-112 [Accessed 26th August 2021 at [https://doi.org/10.1016/S0169-8141\(01\)00016-6](https://doi.org/10.1016/S0169-8141(01)00016-6)]
- López Peláez, A. (2015) *Teoría del Trabajo Social con grupos/Theory of Social Work with Groups. 2ed*. Madrid: Universitas
- Manzini, E. (2015) *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. Cambridge (Massachusetts) / London: The MIT Press
- Morgan, M. G., Fischhoff, B. Bostrom, A. Atman, J C. (2002) *Risk communication: a mental models approach*. New York: Cambridge University Press
- Nesta (2020) *Toolkits*. [Accessed 23 October 2020 at <https://www.nesta.org.uk/toolkit/?offset=20>]
- Nielsen, L., Storgaard Hansen, K., Stage, J. & Billestrup, J. (2015) A Template for Design Personas. *International Journal of Sociotechnology and Knowledge Development*, 7, 1, 45-61 [Accessed 26th August 2021 at <https://doi.org/10.4018/ijskd.2015010104>]
- Norman, D. (2019) Design as Communication. *Jnd*. [Accessed 17 September

- 2020 at https://jnd.org/design_as_communication/
- Northern, H. (1969) *Social Work with Groups*. New York: Columbia University Press
- Özesmi, U. Ozesmi S.L. (2004) Ecological models based on people's knowledge: a multi-step fuzzy cognition mapping approach. *Ecological Modeling*, 176, 1-2, 43-64 [Accessed 26th August 2021 at <https://doi.org/10.1016/j.ecolmodel.2003.10.027>]
- Pelta, R. (2020) Co-diseño para la intervención social. La creatividad aplicada a proyectos sociales. In R. Cabrera, (ed) *Rumbos atrevidos pero necesarios. Conversaciones entre innovación, arte y creatividad*. Madrid: GKA Ediciones (pp. 167-183)
- Pérez-Montoro, M. & Codina, L. (2017) *Navigation Design and SEO for Content-Intensive Websites. A Guide for an Efficient Digital Communication*. Cambridge: Chandos Publishing
- Ricart, M. & Saurí, E. (2009) *Processos creatius transformadors. Els projectes artístics d'intervenció comunitària protagonitzats per joves a Catalunya*. Barcelona: Ediciones del Serbal
- Sanders, E.B. & Stappers, P.J. (2008) Co-creation and the new landscapes of design. *Co-design. International Journal of CoCreation in Design and the Arts*, 4, 1, 5-18 [Accessed 18 September 2020 at <https://www.tandfonline.com/doi/abs/10.1080/15710880701875068>]
- Sander, E.B. & Stappers, P.J. (2012) *Convivial Toolbox. Generative Research for the Front End of Design*. Amsterdam: BIS Publishers
- Sarry, R.C. & Galinsky, M. J. (1985) A conceptual framework for group development. in M. Sundel, P.Glasser, R. Sarri and R. Vinter (eds) *Individual change through small groups* (2^aed). New York: The Free Press (pp. 70-87)
- Schön, D. A. (1983) *The reflective practitioner: How professionals think in action*. New York: Basic Books
- Selloni, D. & Corubolo, M. (2017) Design for Social Enterprises: How Design Thinking Can Support Social Innovation within Social Enterprises. *The Design Journal*, 20, 6, 775-794 [Accessed 26th August 2021 at <https://doi.org/10.1080/14606925.2017.1372931>]
- Service Design Tools. (2020) The open collection of tools and tutorials that helps dealing with complex design challenges. *Service Design Tools*. [Accessed 20 October 2020 at <https://servicedesigntools.org/>]
- Shenaar-Golan, V. & Walter, O. (2018) Art Intervention in Group Settings: A Course Model for Social Work Students, *Social Work with Groups*, 41, 1-2, 89-102, [Accessed 26th August 2021 at <https://doi.org/10.1080/01609513.2016.1258622>]

- Siu, K.W.M. & Wong, Y. L. (eds.) (2019) *Practice and Progress in Social Design and Sustainability*. Hershey, Pennsylvania: IGI Global
- Thorpe, A. & Gamman, L. (2011) Design with society: why socially responsive design is good enough, *CoDesign*, 7, 3-4, 217-230 [Accessed date? at <https://doi.org/10.1080/15710882.2011.630477>]
- Villegas-Castrillo, E. (1993) El trabajador social en el trabajo de grupo. *Alternativas. Cuadernos de Trabajo Social*, 2, 119-136 [Accessed 26th August 2021 at <https://doi.org/10.14198/ALTERN1993.2.7>]