



# HELPE

Health Literacy in Physiotherapy Education

Community Based Learning in Health Literacy



School  
of Health  
Sciences



HS Gesundheit  
BOCHUM



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### **1. Introduction to Community-Based Learning**

Community-Based Learning (CBL) is an educational approach that emphasizes the integration of meaningful community service with academic instruction, promoting civic engagement, and social responsibility. Because of the methodology of teaching and learning that provides context for building academic and work-readiness skills is community-based learning, also called service learning. Despite the diversity of definitions and theories related to CBL, some common criteria have been identified in the literature (Flecky, 2011):

1. Service/community based projects are grounded in real and relevant community needs and challenges.
2. Projects involve students in a constructive research process that addresses community issues.
3. Students lead and carry out projects with guidance and support from educators and community partners.
4. Projects take place over an extended period, typically weeks or months, allowing for meaningful engagement with community stakeholders.
5. CBL promotes students' understanding of community issues, collaboration in working teams, responsibility in project design, implementation, and final product delivery, and reflection on project process and outcomes.

CBL identify complex community problems that requires a participatory and collaborative approach that leverages the expertise (students) and resources of all stakeholders to create sustainable solutions that benefit the community as a whole. Students and community stakeholder are together involvement in the problem-solving process. The stakeholders have specific knowledge of the community and their interests and goals influence the perception of the problem. CBL tasks provide students with opportunities to take on leadership roles and

require them to collaborate and consult with a variety of stakeholders, including community members, policymakers, and other experts.

CBL shares similarities with project-based learning, such as focusing on open-ended questions, providing authentic applications, developing collaboration and teamwork abilities, promoting creativity and critical thinking skills, emphasizing independence and inquiry, and providing solutions to real-world problems. However, CBL integrates community service as a core component and prioritizes community engagement and social responsibility.

## **2. The learning process in community based learning**

CBL is to offer students the opportunity to learn by participating in collaborative community projects that have a meaningful impact on society (Eyler & Giles, 1999). According to Stanton (2016), CBL is an experiential learning approach that involves the following features:

- Projects begin with a community-based problem or issue that motivates students to take action and provides a context for learning.
- Students engage in community/services activities that are central to a particular discipline and that require them to apply critical thinking, problem-solving, and communication skills.
- Students work closely with community members and stakeholders to identify needs, develop solutions, and implement their project.
- Projects are designed to address the needs of the community and create positive social change, while also advancing students' learning.
- Students are supported with appropriate resources and technologies that enable them to successfully complete their projects.
- Students produce tangible outcomes, such as reports, presentations, or community events, that are evaluated by teachers and community members.

The benefit from CBL projects is not limited to students: communities also benefit from engaging in CBL projects. However, the actual impact on the community is not sufficiently studied (Benson, Harkavy & Hartley, 2005; Bushouse, 2005; Cruz & Giles, 2000; Schmidt & Robby, 2002).

CBL is deeply rooted in cognitive and developmental psychology, pragmatic philosophy, and democratic theory (Petkus, 2000). The contribution of the Kolb (1984) experiential-learning model, which outlines the learning experience as a constantly revisited four-step cycle, where different learning roles are assumed throughout (figure 1).

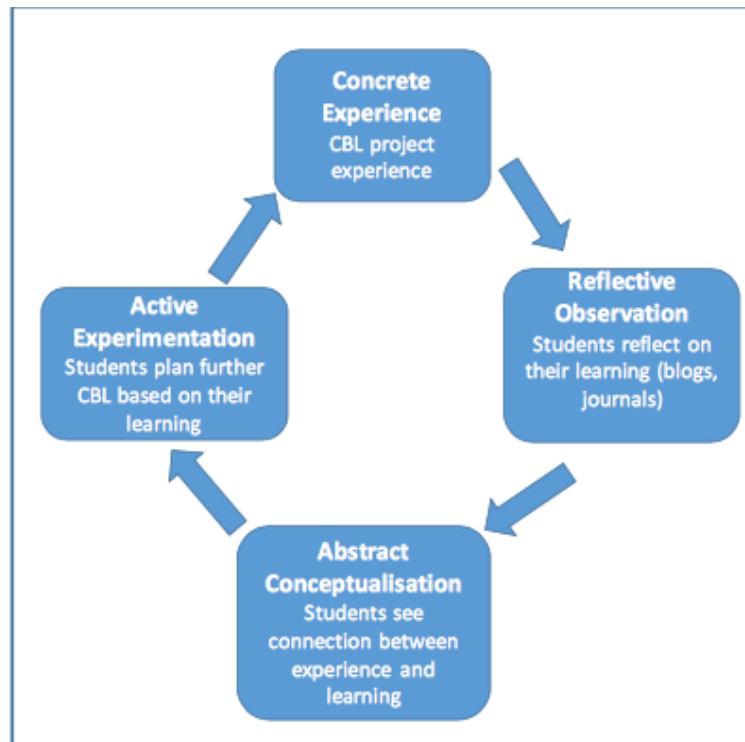


Figure 1. Kolb's experiential learning theory (adapted from Petkus, 2000).

Kolb's experiential learning theory can be effectively applied in the context of CBL. CBL refers to an educational approach that connects classroom learning with real-world experiences and community engagement. It involves collaborating with community organizations, addressing community needs, and fostering civic responsibility. Kolb's theory aligns well with CBL because it emphasizes the central role of experience in the learning process. Here's how the two concepts intersect:

- (1) **Concrete Experience:** Community-based learning provides opportunities for students to engage in hands-on experiences within the community. This can include volunteering, internships, fieldwork, service-learning projects, and other activities that allow students to directly interact with community members, organizations, and social issues. These concrete experiences provide a solid foundation for learning.
- (2) **Reflective Observation:** After engaging in community-based activities, students are encouraged to reflect on their experiences. They can analyze the impact of their actions, critically examine social issues, consider different perspectives, and evaluate the outcomes of their community involvement. Reflective observation helps students deepen their understanding and develop a broader awareness of the community and its needs.
- (3) **Abstract Conceptualization:** Building on their reflective observations, students can apply abstract conceptualization to their community experiences. They can connect their community involvement with academic theories, concepts, and frameworks. This stage involves analyzing patterns, identifying underlying principles, and conceptualizing the knowledge gained from community engagement.
- (4) **Active Experimentation:** Community-based learning encourages students to actively apply their learning in the community. They can design and implement projects,

develop solutions to community problems, and engage in collaborative problem-solving. Active experimentation enables students to test their ideas, learn from successes and failures, and refine their skills through practical application.

By integrating CBL with Kolb's experiential learning theory, students can have transformative educational experiences. They not only gain knowledge and skills but also develop a sense of social responsibility, empathy, and a deeper understanding of the real-world implications of their learning. CBL provides a meaningful context for students to apply theory to practice and make positive contributions to their communities.

The High-Quality Community-Based Learning (HQCBL) framework proposes six criteria for implementing CBL that promote effective and meaningful community engagement (Stanton, 2016). These criteria are:

- (1) **Community Connection and Impact** (students engage with community partners to address real-world problems and promote positive social change)
- (2) **Intellectual and Personal Development** (students develop deep understanding, critical thinking, problem-solving, and leadership skills)
- (3) **Collaboration and Teamwork** (students work together in diverse teams, share responsibilities, and build communication and interpersonal skills)
- (4) **Reflection and Assessment** (students reflect on their experiences, learning, and growth, and receive feedback and assessment from multiple sources)
- (5) **Diversity and Inclusion** (students engage with diverse communities and perspectives, and respect and value differences)
- (6) **Ethics and Responsibility** (students act ethically, responsibly, and with integrity in their community engagement and service activities).

Other factors, such as adequate planning and preparation, clear learning goals and outcomes, assessment strategies that align with learning objectives, and teacher support and training, are also important for the effectiveness of CBL. Ultimately, CBL is a student-centered approach that values the voice and agency of students and promotes their personal and social development through meaningful community engagement.

### **3. Community-Based Learning development**

CBL development involves the creation and implementation of educational initiatives that integrate classroom learning with active engagement in the community. It is a collaborative and experiential approach that aims to foster civic engagement, social responsibility, and the application of knowledge and skills in real-world contexts (Bingle & Hatcher, 1996).

When developing CBL programs, several key factors should be considered. First, establishing strong partnerships between educational institutions and community organizations is crucial (Eyler & Giles, 1999). These partnerships provide opportunities for collaboration, resource-sharing, and mutual learning between students, educators, and community members.

Designing meaningful and relevant CBL experiences requires careful planning and consideration of community needs and priorities (Zlotkowski, 1995). It is essential to engage

community stakeholders in the development process, seeking their input and expertise to ensure that the learning experiences align with community goals and values.

Integration of reflection is another critical element in CBL development. Reflection activities, such as guided discussions, journals, or group reflections, enable students to critically analyze their experiences, connect them to academic concepts, and develop a deeper understanding of social issues and their personal role in addressing them (Bringle & Hatcher, 1996).

Evaluation and assessment play a vital role in the development of CBL initiatives. By incorporating assessment methods that measure both student learning outcomes and community impact, program developers can ensure the effectiveness and sustainability of CBL initiatives (Bringle & Hatcher, 1996). This feedback loop allows for continuous improvement and refinement of the learning experiences.

Phase	Description	Project Management Elements
<b>Planning Phase</b>	<ul style="list-style-type: none"> <li>- Identifying community needs and issues</li> <li>- Establishing project goals and objectives</li> <li>- Forming partnerships and building relationships with community members</li> <li>- Assessing available resources and capabilities</li> <li>- Developing a project proposal and obtaining approvals</li> </ul>	<ul style="list-style-type: none"> <li>- Defining project scope and objectives</li> <li>- Creating a project plan and timeline</li> <li>- Assigning roles and responsibilities</li> <li>- Creating a budget and resource plan</li> <li>- Establishing communication protocols</li> </ul>
<b>Implementation Phase</b>	<ul style="list-style-type: none"> <li>- Conducting community needs assessments</li> <li>- Designing and implementing interventions and activities</li> <li>- Coordinating project logistics and scheduling</li> <li>- Engaging and involving community members</li> <li>- Documenting and reporting project outcomes and impacts</li> </ul>	<ul style="list-style-type: none"> <li>- Managing project risks and issues</li> <li>- Monitoring project progress and quality</li> <li>- Managing project resources and budgets</li> <li>- Facilitating communication and teamwork</li> <li>- Adapting project plans as necessary</li> </ul>
<b>Reflection and</b>	<ul style="list-style-type: none"> <li>- Reflecting on project process and outcomes</li> </ul>	<ul style="list-style-type: none"> <li>- Facilitating project evaluations</li> </ul>
<b>Evaluation Phase</b>	<ul style="list-style-type: none"> <li>- Evaluating the success of the project and its impact on the community</li> <li>- Identifying areas for improvement and future work</li> <li>- Celebrating successes and recognizing contributors</li> </ul>	<ul style="list-style-type: none"> <li>- Analyzing project outcomes and impacts</li> <li>- Incorporating feedback and recommendations</li> <li>- Closing out the project and transitioning</li> </ul>

#### 4. Design Thinking Process

Reflection is another key component, as students critically analyze their experiences and consider the broader social and ethical implications (Eyler & Giles, 1999). Reciprocity is also

emphasized, recognizing the valuable knowledge and expertise that community members contribute to the learning process (Eyler & Giles, 1999).

The design thinking process is a problem-solving approach that emphasizes empathy, collaboration, and iteration (Brown, 2008). It consists of several stages that guide the development of innovative solutions. The first stage, empathize, involves understanding the needs and perspectives of the people for whom the design is intended (Plattner *et al.*, 2011). By actively listening and observing, designers gain insights into the challenges and opportunities they aim to address. The next stage, define, involves synthesizing the gathered information to identify the core problems or opportunities (Plattner *et al.*, 2011).

This step helps frame the problem statement and guides subsequent stages. Ideation follows, focusing on generating a wide range of creative ideas (Brown, 2008). This stage encourages brainstorming and exploring unconventional solutions. Prototyping comes next, where tangible representations of ideas are created to gather feedback and learn from them (Plattner *et al.*, 2011). Testing is then conducted to evaluate the viability and desirability of the prototypes (Brown, 2008). The final stage is implementation, where the refined ideas are transformed into practical solutions (Plattner *et al.*, 2011). Collaboration with stakeholders and iterative refinement are key aspects of this stage.

Design thinking is a human-centered approach to problem-solving and innovation that emphasizes empathy, creativity, and iterative development (Brown, 2008). It provides a structured framework for tackling complex problems and generating innovative solutions. The design thinking process typically consists of five key stages (figure 2): empathize, define, ideate, prototype, and test (IDEO, n.d.).

- (1) **Empathize:** During the empathize stage, designers seek to understand the needs, desires, and behaviors of the users or customers they are designing for. This involves conducting research, engaging in interviews, and observing users in their natural environments (Kelley & Kelley, 2013).
- (2) **Define:** In the define stage, designers synthesize the information gathered during the empathize stage to identify the core problem or challenge. This involves analyzing research data, identifying patterns, and framing a clear problem statement or a "point of view" (Brown, 2008).
- (3) **Ideate:** Ideation is the stage where designers generate a wide range of creative ideas and potential solutions to the defined problem. This is done through brainstorming sessions, sketching, and other creative techniques to foster divergent thinking (IDEO, n.d.).
- (4) **Prototype:** Prototyping involves creating tangible representations of the ideas generated during the ideate stage. This allows designers to explore and communicate potential solutions. Prototypes can take various forms, such as sketches, physical models, or interactive simulations (Brown, 2008).
- (5) **Test:** In the testing stage, designers gather feedback and insights from users and stakeholders by sharing and evaluating the prototypes. This feedback helps refine and iterate on the solutions. The iterative nature of design thinking encourages multiple cycles of testing, feedback, and refinement (Kelley & Kelley, 2013).

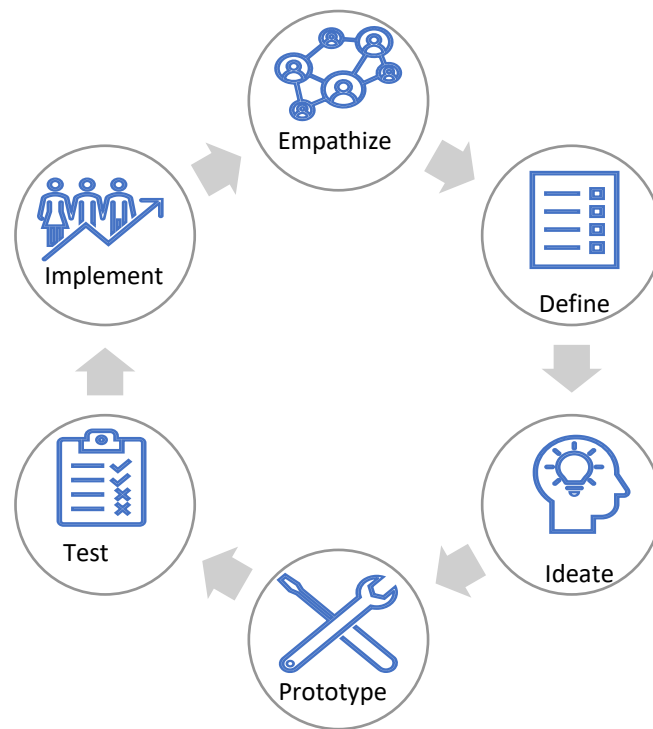


Figure 2. Five stages of the Design Thinking Process

CBL and the design thinking process can be combined to create a powerful approach for problem-solving and innovation within a community. This integration allows for the utilization of collective knowledge, experiences, and perspectives of community members to address complex challenges in a collaborative and human-centered way. While there may not be specific citations for the combination of these two methodologies, I can provide references that highlight the individual concepts and their benefits.

CBL emphasizes the importance of engaging with the community to enhance learning experiences and address real-world issues (Bringle, Hatcher & Clayton, 2019). It promotes active involvement, mutual collaboration, and a focus on social change within a specific community.

On the other hand, design thinking is a human-centered problem-solving approach that involves understanding user needs, prototyping, and iteration (Brown, 2008). It provides a structured framework for creative problem-solving and innovation.

By combining these two approaches, one can adapt the design thinking process to a community context, engaging community members as co-creators and stakeholders throughout the problem-solving journey. This integration enables a more inclusive, contextually relevant, and sustainable approach to addressing community challenges.

While there might not be specific studies or publications on the combination of these two methodologies, the principles and benefits of each can be effectively applied together to empower communities and drive meaningful change.



## 5. Community-Based Learning and health literacy

CBL can play a crucial role in improving health literacy by providing practical and relevant health education in the community.

According to Smith and Johnson (2018), "Community-based learning programs have been shown to improve health literacy by engaging community members in the learning process and addressing their specific health needs".

By integrating CBL approaches into health literacy initiatives, individuals can become more informed, empowered, and engaged in managing their health. These programs help bridge the gap between health information and its practical application, leading to improved health outcomes and better overall well-being within the community.

Here are a few ways in which CBL can enhance health literacy:

- **Tailored Programs:** Community-based learning allows for the development of customized health literacy programs that address the specific needs and challenges of a particular community. These programs can be designed to focus on prevalent health issues, such as chronic diseases, mental health, or preventive care.
- **Participatory Approach:** Community members can actively participate in the learning process, sharing their experiences, knowledge, and concerns. This approach encourages collaboration, builds trust, and promotes a sense of ownership over one's health. It also ensures that educational materials and messages are culturally appropriate and easily understood by the target audience.
- **Skill-Building:** Community-based learning can offer practical skills training, such as how to navigate the healthcare system, read medication labels, interpret health-related information, or communicate effectively with healthcare providers. By developing these skills, individuals become more confident and capable of managing their own health.
- **Peer-to-Peer Education:** Community members can be trained as peer educators to deliver health literacy programs. Peers can connect with their counterparts more effectively, using relatable language and shared experiences to convey health information. Peer-to-peer education can be especially valuable in marginalized or underserved communities, where trust in traditional authority figures may be limited.
- **Accessible Resources:** CBL initiatives can provide easily accessible health resources, including brochures, pamphlets, videos, or websites, tailored to the community's needs. These resources should use plain language, visual aids, and culturally sensitive materials to enhance understanding and engagement.
- **Collaborations:** CBL often involves collaborations between educational institutions, healthcare organizations, community leaders, and other stakeholders. These collaborations can facilitate the exchange of knowledge, resources, and best practices, leading to more effective health literacy programs.

## 6. Health literacy competencies

The course objective is to apply students' knowledge regarding HL at the **meso-level**. HL competencies can be generally classified into 3 levels (Murugesu, 2018; Koh *et al.*, 2013):

- a) **Micro-level:** focusses on the direct interaction between the health care provider and clients
- b) **Meso-level:** addresses the organization of care, with a particular focus on optimizing existing structures and processes
- c) **Macro-level:** involves the general preconditions for implementing good care into practice. This includes, in particular, policy and related activities at the organizational or national level

Two main HL competency categories should be specifically addressed in CBL:

1. Improve organizational structures related to HL
2. Improve communicational management related to HL

Students' projects can represent one or more of the following HL competencies (these can be defined based on the individual needs of the respective study program):

Improve organizational structures related to HL

B1.1 Create a culture and mechanism that promotes effective HL

B1.2 Promote the implementation of HL

B1.3 Link to supported systems

B1.4 Promote quality improvement

Improve communicational management related to HL

B2.1 Contribute to the communicational improvement in health care delivery in teams, organizations and systems

B2.2 Respond to the needs of written and digital tools related to communication

B2.3 Work and communicate effectively with service users and interprofessional teams

## 7. Implementation in the curriculum

### Recommended course description

<b>Name of the course:</b>	<b>Entrepreneurship and transition to professional practice</b>
Type:	Seminar/workshop (Group work, supervision, self-reflection)
ECTS	3
Semester	Recommended in 7 <sup>th</sup> semester

\*This activity can be part of the course- as for example at FCS Blanquerna, Spain.  
The seminar can also take place in earlier semesters.

### Description

The Seminar is a training format of the Blanquerna Faculty of Health Sciences of the Ramon Llull University (FCSB-URL), which is carried out in small groups of students, which allows for the promoting of initiatives and fostering of teamwork, dialogue, reflection and resolution of the situations discussed and linked to the content and knowledge oriented to the world of work.

It allows for the analysis of strategies to be applied in future professional practice, promoting business consolidation and growth, entrepreneurship and the most qualified workplaces.

### **Learning outcomes**

Students in CBL are able to:

1. develop, promote and implement an idea
2. Identify problems related to HL and elaborate a plan to provide creative solutions
3. Identify problems related to HL and formulate questions that can be answered via research
4. develop teamwork and leadership skills

### **Content of the course**

Creativity and lateral thinking. The innovative process. Creative skills Development, promotion and implementation of an idea. Helps and mechanisms to develop an idea. Organizational structure: individual roles and corporate culture.

The entrepreneurial process associated both with the development of a project in an institution and in the private sphere. Innovative people, innovative teams and innovative organizations. Identification of problems and opportunities. Creative problem solving? Creativity and research.

### **8. Implementation of a CBL Project**

#### **1. Group creation**

Create groups of 4-7 students that will work together in the project.

#### **2. Topic selection:**

Students must select a topic for their project through group discussion. To do so, they must identify an existing problem related to health literacy in their environment (community, clinical placement, university...)

Example: The lack of information regarding osteoarthritis recommendations for low HL patients in clinical placements.

#### **3. Project objectives definition**

Based on the chosen topic, students must define the specific objectives of their project. The project objectives must be related to the improvement of communication management and/or organizational structures. Project objectives must be explicit, concrete, achievable and assessable.

#### **4. Project development**

Students will work in groups to develop the project's materials. To do so, they might need to get information regarding the specific setting and clients.

## 5. Project implementation

If possible, students should try to implement their project in real settings. Take into consideration that explicit permission might be needed for interventions taking place in a health or community centre.

## 6. Impact evaluation

Students should assess, quantitatively and/or qualitatively, the impact of their intervention using proper tools. This should also include a self-reflection of the strengths and limitations of the project.

Example: number of users, users' satisfaction, service improvement...

## 7. Presentation

The project may be presented in a written and/or oral format. This presentation should include all steps of the project and not only the final products (ex: triptych).

Evaluation of the results:

A critical evaluation of the project will be made to see if the results obtained are aligned with the predefined objectives.

It is recommended to take into consideration all project steps and not only the final implementation. Also, student's final reflections regarding the strengths and weaknesses should be taken into consideration as they are an indicator of the students learning process.

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