

PEER SOCIAL LEARNING MODELS⁸

Assoc. Prof. Lora Radoslavova, PhD

Department of Pedagogy,

University of Ruse “Angel Kanchev”

Tel.: 082 888 219

E-mail: lradoslavova@uni-ruse.bg

***Abstract:** This paper explores the mechanisms and benefits of peer social learning, emphasizing its role as a powerful agent of cognitive, emotional, and social development in educational contexts. Drawing on theories such as social constructivism, social learning theory, and models like reciprocal teaching, peer tutoring, and collaborative learning, the text outlines how children and students co-construct knowledge through interaction, observation, feedback, and teaching. It highlights key processes including support, imitation, dialogic learning, and experiential engagement within both formal and informal settings. Peer learning contributes for deeper understanding, enhances memory retention through elaboration, builds communication and social skills, and strengthens community connections. The peer-based approaches are not only effective and context-sensitive, but also cost-efficient, making them essential to modern pedagogical practice.*

***Key words:** Peer Social Learning, Models, Theories, Social Development.*

INTRODUCTION

The process of social learning has been examined through various psychological and pedagogical frameworks. Among them is the sociokinetics theory, conceptualized as a “self-regulated children's social formation, established with the aim of implementing a socially significant idea.” (Stoyanova, D., 2020). Interpersonal communication plays a fundamental role in shaping peer relationships. Its structure can be described as “a set of four components: interpersonal communication as communication; interpersonal communication as social perception; interpersonal communication as attitude; interpersonal communication as interaction.”(Vasileva, V., 2016). “In order to integrate successfully into today’s complex society, every individual needs a specific set of social skills that enable effective emotional regulation, the development of healthy interpersonal relationships, communication, and cooperation with others. These are structural components that form part of the broader concept of emotional intelligence.”(Ilieva, B., 2021). “One of the characteristics of modern education is that it focuses on the activity of children and pupils, given their acquisition of different competencies and experience related to the ability to properly use scientific and technological knowledge, skills for practical problem solving, and adequate response in certain situations.”(Ivanova, E., 2022).

In the contemporary society, this topic appears to outpace existing theoretical and applied scientific research. The influence of peers in social learning may represent a phenomenon of considerable social significance, one that warrants increased scholarly attention and in-depth investigation. As Ladd observes “because peers mature on similar timetables, develop similar interests and skills, and spend increasing amounts of time with each other during the early childhood years, it has been theorized that children learn different things from agemates than they are likely to acquire from other socializers, such as parents, siblings, and teachers. This premise can be seen as part of a larger "social learning hypothesis" that depicts peers as important and influential socializing agents, and that attributes the bulk of peer influence to the interactions that children have with peers and the experiences they are afforded in peer relationships.” (Ladd, G. W., 2007). “How children process social information in a series of sequential information, is related to their degree of peer acceptance skills. Several specific activities can be implemented to teach competences of social skills: (a) establishing an intent to learn the skill or social behaviour patterns., (b) defining the concept of social skills, (c) provide showed socially competent behaviour (e.g., frequent peer

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modeling examples of social skills, (d) promoting rehearsal group entry) encoded relevant information more free- of the skill concept, and (e) generalizing the concept.”(Dong Hwa Choi¹, Juhu Kim, 2003).

EXPOSITION

Mechanisms and corresponding models of peer social learning

Collaboration and interaction

- *Social Constructivist Model*. (Vygotsky⁹). Learning is constructed through social interaction. “His scientific contemporaries popularize the stimulus-response theories of behaviour”. The main features are that the more capable peers help others bridge learning gaps; dialogue and supporting are central, knowledge is building with others, according to the environment.

- *Reciprocal Teaching Model* (Palincsar, A. S., & Brown, A. L., 1984:121). Peers take turns teaching and learning from each other using guided strategies like summarizing, questioning, clarifying, and predicting. Rotating peer roles (teacher/learner) and focused on dialogic interactions are the central idea.

- *Collaborative Learning Model*. Learning occurs through joint efforts toward shared goals. The emphasis is on group processing, accountability, and shared cognition, teamwork and shared responsibility. Each peer brings unique knowledge and perspectives, encourages negotiation of meaning.

- *Cognitive Elaboration Model* (Wittrock, M., C., 1992). Explaining concepts to others and elaborating on ideas deepens understanding. Interaction prompts deeper cognitive processing through explaining reinforces understanding, challenging and building on ideas, encouraging elaboration through questions and feedback.

- *Peer Tutoring Model* (Topping, K. J., 2005). A more knowledgeable peer (not necessarily older) helps a less knowledgeable one through structured, interactive support. This model requires asymmetry in knowledge or skill level, emphasis on feedback and dialogue, building confidence and understanding for both.

Observation and imitation

- *Social Learning Theory* (Albert Bandura). People learn new behaviors by observing others and then imitating those behaviors, especially when they see the behavior being rewarded.

The key processes are attention – learner notices the peer's behavior; retention – learner remembers the behavior; reproduction – learner copies the behavior; motivation – learner is motivated to imitate, especially if the model is successful or admired.

- *Modeling and Vicarious Reinforcement*. Learners don't just imitate behaviors - they also internalize consequences observed in others (vicarious reinforcement or punishment). If a peer is rewarded for a behavior, others are more likely to mimic it, if a peer is punished or fails, others may avoid the behavior. It is effective in classroom settings, especially with behavior management or study strategies.

- *Cognitive Apprenticeship Model* (Brown, Collins, 1989). Novices learn from more experienced peers by observing expert behavior in real contexts, followed by guided practice. The phases are peer modeling of thinking processes (e.g., "thinking aloud"); supporting gradually withdrawn as learner gains independence, emphasizing on situated learning (learning in real-world contexts).

- *Mirror Neuron-Based Learning (Neuroscientific Perspective)* (Rizzolatti, G., & Craighero, L., 2004). According to the theory the brain has "mirror neurons" that activate both when performing an action and when watching someone else do it. This supports learning through imitation at a neurological level. The model explains why humans are so effective at imitating, ties into empathy, mimicry, and skill learning, particularly relevant for motor and social-emotional learning.

Feedback and support.

- *Sociocultural Theory* (Vygotsky). Learning happens in social contexts, where peers provide scaffolding - temporary support that helps a learner do what they couldn't do alone. Peers give hints, ask guiding questions, or clarify confusion. Support is gradually reduced as competence increases. Builds confidence and autonomy.

- *Formative Assessment in Peer Learning*. Peers give formative feedback - feedback that helps to improve learning during the process, not just after. Focusing on constructive critique; encouraging self-regulation and reflection; often guiding by rubrics or criteria to ensure quality.

⁹ MICHAEL, C., S. SCRIBNER. <https://doi.org/10.2307/j.ctvjf9vz4.4>. <https://www.jstor.org/stable/j.ctvjf9vz4.4>

- *Peer Coaching Model*. (Ladyshevsky, R. K., 2006). Peers act as learning partners, offering mutual support, reflective questioning, and non-judgmental feedback to promote personal and academic growth. Main features are emphasizing emotional safety and trust, feedback, which is conversational and growth-oriented, working well in both academic and leadership settings.

- *Community of Practice* (Lave & Wenger, 1991). Learning happens in social communities where members support each other through shared practice, feedback, and identity formation. The feedback should flow naturally through participation, peer supporting helps newcomers become full participants, focusing on belonging, identity, and gradual learning.

- *Psychological Safety Theory* (Edmondson, 1999). Peer feedback is most effective when learners feel psychologically safe - free to take risks without fear of judgment or embarrassment. Errors are seen as learning opportunities, encouraging speaking up, asking for help, and experimenting.

Reinforcement- teaching others

- *Learning by Teaching (The Protégé Effect)* (Fiorella, L., & Mayer, R. E., 2013). Teaching someone else forces the explainer to organize knowledge, clarify understanding, and fill in gaps - reinforcing their own learning in the process. The model includes encouraging active retrieval and restructuring of information, boosting metacognition (thinking about one's own thinking), and works best in equal-status peer settings where both parties benefit.

- *Cognitive Elaboration Theory* (Wittrock, M. C., 1990:38). Explaining content to peers requires learners to elaborate, making connections and generating examples - which enhances understanding and memory retention. The focus is over elaboration strengthens memory pathways, working best when the peer learner asks questions or challenges ideas, more effective in non-hierarchical, conversational settings.

- *Peer Teaching & Equal-Status Interaction Model* (Cohen, E. G., 1994:19). In peer learning environments where participants are equal in status, mutual teaching reinforces learning for both, while promoting confidence and cooperation. Key characteristics- no formal teacher-student divide; roles of teacher/learner are fluid and interchangeable, encourages reciprocal reinforcement - both parties benefit.

- *Constructivist Teaching Theory*. Learners construct knowledge actively - and teaching others is one of the most active forms of learning. Peer explanations often use simpler language, aiding understanding, reinforcement occurs through meaning-making, not just repetition, teaching requires synthesizing and repackaging ideas.

- *Social Interdependence Theory* (Johnson & Johnson, 2009:368). In cooperative learning settings, individuals are motivated to help their peers succeed, which reinforces their own learning through teaching and support. The theory requires positive interdependence: each one's success is tied to others'; equal contribution and mutual accountability; reinforcement is both cognitive and social.

Active learning

- *Constructivist Learning Theory* (Piaget & Vygotsky). Learners actively construct their own understanding by interacting with concepts, experiences, and peers - not by passively absorbing information. The key recommendations are emphasizing active engagement, questioning, and meaning-making; peers are providing cognitive conflict and diverse perspectives, learning is social, contextual, and exploratory.

- *Experiential Learning Theory* (Kolb). Learning is a cyclical process that includes doing, reflecting, thinking, and applying - best done in peer contexts for feedback and refinement.

The stages are concrete experience; reflective observation; abstract conceptualization; active experimentation. The peer role is to help learners move through the cycle by sharing experiences, asking reflective questions, and suggesting new actions.

- *Active Learning Framework* (Bonwell & Eison, 1991, By Ana Serrano Tierz, Anna Maria Biedermann, 2015). Active learning includes anything that involves students in doing things and thinking about what they are doing - best achieved with peer involvement. Learning is participatory (e.g., discussions, group work, problem-solving); peer interaction increases engagement and accountability; leads to deeper learning than lecture-based formats.

- *Dialogic Learning Model* (Alexander, R., 2008:28). Knowledge is co-constructed through dialogue – learners develop understanding by exchanging ideas, reasoning, and questions with peers. The dialogue is reciprocal, respectful, and constructive; emphasizes listening and adapting one's thinking; peers play a central role in shaping each other's understanding.

- *Inquiry-Based Learning (Dewey)*. Learners actively explore questions or problems, often in peer groups, constructing understanding through investigation and collaboration. Students generate or investigate questions; peers contribute to hypotheses, research, and reflection, building critical thinking and curiosity.

Contextual- learning

- *Situated Learning Theory (Lave & Wenger, 1991)*. Learning is most effective when it's embedded in authentic, real-world contexts. Knowledge is not abstract - it's situated in the activity, culture, and social context where it's used. Main characteristics- peers learn together through legitimate peripheral participation (e.g. starting as novices and becoming experts through real practice); learning is social and contextual, not just cognitive; focusing on "learning by doing" with others in meaningful settings.

- *Community of Practice (Also Lave & Wenger)*. People learn through participation in shared communities, where they gradually move from novice to expert through social engagement in real contexts. Peer elements- peers at various levels of experience support one another; shared tasks, language, and goals create a cohesive learning environment; learning is identity-driven - learners become part of a professional or disciplinary community.

- *Authentic Learning Model (Herrington, J., & Oliver, R., 2000)*. Learners engage in real-world tasks that are meaningful, complex, and often interdisciplinary - typically in collaborative settings. Key features- tasks mirror professional practices; peers share responsibility, negotiate roles, and co-construct solutions; encourages relevance, motivation, and application.

- *Ecological Perspective on Learning*. Learning is shaped by interactions with the environment, including peers, tools, and cultural practices - it happens in context, not in isolation. Peers are part of the learner's immediate learning environment; peer collaboration adapts to setting (classroom, field, online); encourages adaptive, responsive learning.

- *Context-sensitive learning*. "Contextual Learning" supports and enhances all the other peer learning mechanisms they've explored: collaboration becomes richer when rooted in real problems. Observation and imitation become more meaningful in authentic environments; feedback is more impactful when tied to real tasks. Teaching others is more effective when explaining real-world applications. Active Learning thrives when learners see immediate relevance.

Informal and formal peer social learning

- *Formal Peer Learning Framework (Mazur, E., 1997:12)*. In structured environments (classrooms, workshops, academic programs), peer learning is designed with clear goals, roles, and protocols. The interactions are structured through time-bound, teacher-facilitated; roles are assigned: tutor/tutee, group leader, note-taker, etc.; often assessed or evaluated.

- *Informal Learning Theory (Marsick & Watkins, 1909)*. Learning happens outside of formal settings through conversations, collaboration, and spontaneous reflection - often peer-driven. Its main characteristics are unplanned, non-linear, and embedded in daily life; driven by curiosity, social need, or shared goals; highly social and situated in real-time contexts.

CONCLUSION

The benefits of Peer Social Learning are deeper understanding and knowledge retention, teaching or explaining to peers strengthens memory and understanding (Protégé Effect), engaging in dialogue promotes elaboration, reflection, and conceptual clarity.

Development of Social and Communication Skills includes encouraging active listening, questioning, and respectful disagreement. It builds collaboration, teamwork, and conflict resolution skills, helps learners communicate ideas clearly and adapt explanations based on audience, increases engagement and motivation. Learners often feel more comfortable interacting with peers than with authority figures. Shared responsibility and peer accountability drive participation. Peer discussions involve challenging assumptions, testing ideas, and justifying thinking.

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