

INQUIRY BASED LEARNING TO DEVELOP SOCIAL SKILLS: RESEARCH REVIEW

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Abstract

The modern era demands that society members who have good social skills like communication skills, interpersonal skills, decision making skills and learnt verbal and nonverbal behavior. These necessary skills can be developed through the modification in the current instructional strategies. From the past times teachers are heavily rely only on chalk and talk method. Now there is a demand of society to shift the teaching learning process to learner centered and this can be possible through the adoption of constructivism based instructional methods like inquiry-based learning. It is that learning, in which learners construct their concepts with framing questions, constructing hypotheses, designing and conduction of experiments, generation of explanations. All the phases of inquiry driven instruction utilize the social skills for collective working.

Keywords: Constructivism, Inquiry based learning, social skills.

Introduction

Education plays a vital role to develop the social, emotional, physical, intellectual development of individual. It is the only tool to draw out the innate capabilities, abilities and talents of the individuals. Through the utilization of these talents and abilities, individuals become able to get employment in the modern world. In this

modern era, the requirements of the employment sector have been drastically changed. Now various employment sector demands that individuals who have excellent communication skills, problem-solving skills, creative thinking skills, social skills and critical thinking skills. Now the modern concept of education has been changed to equip the learners with

these 21 century skills. In the present time, there is a need to shift the classroom from teacher-oriented methods to learner-oriented innovative pedagogies. The role of teachers also changed in 21st century classroom to impart equitable quality education (Chavada, 2024 & Fatima, 2023). Innovative pedagogies have their roots in constructivism. Here the term constructivism means the generation of knowledge, concepts or theories through interaction with the surroundings. A variety of innovative instructional methods like experiential learning, project-based learning, inquiry-based learning, and storytelling are available to teach the different subjects. The instructor can choose any method of instruction based on the requirements and interests of the learners.

Inquiry-Based Learning

Inquiry-based learning is founded on constructivist concepts that emphasize putting the learner at the center of the teaching and learning process. The learner actively participates in the inquiry-based learning approach, which is more successful than traditional instructional

methods ([Mao, Chang, & Barufaldi, 1998](#)). This learning process begins when students ask various questions about the presented circumstance. In the next phase, learner frames their hypotheses through their observation of their surroundings. Lastly, learner generates their explanations by critically reflecting on the experimental data ([Abdelraheem & Asan, 2006](#)). The principles of inquiry-based learning are 1) ownership: students take responsibility for their learning; they play the role of builder of their knowledge rather than consumption of knowledge. 2) Interest: Personal interest and capabilities become the intrinsic motivation to generate a deeper understanding. 3) Reflection: the identification of weaker sections which need more investigation and applicability of the newly generated concepts in the real-world setting. 4) Previous knowledge: learners actively construct their new concepts through the modification of the existing knowledge. 5) Collaboration: the working of learners in groups results in the development of new understanding through the verification of different viewpoints. 6) Feedback: it assists the individual to reflect on the path of formation of new concepts.

7) Environment: the classroom environment should be congenial for the conduction of the inquiry process ([Murdoch, 2015](#)).

Social Skills

Social skills are the crucial element for any individual to build strong bonds with friends, parents and other society members. Social skills are a combination of communication and interpersonal abilities. Communication skills enable an individual to successfully transmit their thoughts, accept and listen to others' opinions. Interpersonal skills involve listening to people, using appropriate nonverbal cues, and addressing situations beautifully. According to ([Sood, Anand, & Kumar, 2012](#)) divided social skills into five dimensions as the skill of concern for others, relationship/friendship skills, communication skills, self-care/ self-control skills, and decision making/ problem solving skills. So, the application of social skills in life leads to the effective working of the individual in various spheres of life.

Review of studies related to Inquiry Based learning and social skills

[Aydin \(2016\)](#) Conducted a mixed method (focused on the collection and analysis of quantitative and qualitative data) with an explanatory design (explaining quantitative data with the help of qualitative data) to study the “effect of inquiry-based laboratory experiments on the communication skills of prospective teachers”. A sample of 78 second-grade prospective teachers of elementary education was selected. The data was collected using an evaluation of communication skills and interviews. The data were analyzed with t-test and content analysis of interviews. The results of the study indicated that inquiry-based laboratory experiments increased communication skills (being patient, listening to each other, reducing prejudice, being respectful and knowing each other) but some students faced difficulty in lack of sense of responsibility, an insufficient concept related theoretical knowledge and problems related to task sharing, writing reports and getting jobs completed on time. [Jin, Wei, Duran, Guo, and Wang \(2016\)](#) conducted a study to explore “how Chinese physics teachers structured classrooms for the cognitive and social aspects of inquiry-

based science learning”. A sample of 17 physics teachers engaged in teacher education programs in universities and professional development programs in local school districts. The data was analyzed from one video lesson of each teacher. The findings of the study indicated that teachers realized the importance of teaching cognitive processes and disciplinary reasoning under the cognitive aspect of inquiry. On the other hand, teachers were less like to address the ideas about science concepts and principles. In the social aspect of inquiry teachers mostly interacted with the students but faced difficulty in motivation to share their ideas and promote conversation among them.

[Wildan, Hakim, Siahaan and Anwar \(2019\)](#) conducted a study to check the “effect of the stepwise inquiry approach (structured, guided and open inquiry) on communication skills and scientific attitudes”. A pretest-posttest control group design was used for the present study. A sample of 41 students (20 students in the experimental group and 21 students in the control group) from a biochemistry course at the University of Mataram was selected. The experimental and control groups were

treated with stepwise guided inquiry and expository respectively. The data was collected through a communication skills and scientific attitude scale. The data were analyzed using MANCOVA. The results of the study showed that students of the experimental group scored more on communication skills and scientific attitude.

[Yadav \(2019\)](#) conducted a study to find the “effectiveness of inquiry-based learning program on achievement and social skills”. A sample of 80 secondary students was selected through purposive sampling from JES English School Pune. Both experimental and control groups consisted of 40 students. The experimental and control group was treated with inquiry-based learning and conventional method respectively. The data were collected using an achievement test, observation dairy and feedback form. The data were analyzed using mean, standard deviation and t-test. The findings of the study showed that the inquiry-based learning program was more effective and also developed numerous social skills among the students.

[Chandra, Degeng, Kuswandi and Setyosari \(2020\)](#) researched to study the “effect of the

guided inquiry-based learning model on the analysis and social skills of junior high school students”. The quasi-experimental research was conducted for this purpose. A sample of 132 students of grade VII was selected through cluster sampling. The two experimental groups (33 students in each) and two control groups (33 students in each) were taught through guided inquiry and expository method respectively. The data was collected through a social skills rating system and analysis skills test. The data were analyzed using ANOVA. The results of the study showed that students taught through the guided inquiry method had higher social skills than the control group. Findings also indicated that groups with higher social skills had higher analysis skills than the group of students who had low social skills.

[Syarifuddin, Setyosari, Sulton, Kuswandi and Sartika \(2020\)](#) conducted quasi-experimental research to study the “effectiveness of the community of Inquiry (COI) learning model and learning styles on social skills”. A sample of 114 students was selected for this purpose. The two experimental groups (56 students) and two control groups (58 students) were taught

through the COI learning model and cooperative learning model respectively. The data were analyzed with ANOVA. The findings of the study indicated that students of experimental groups had higher social skills. Students differ significantly on the dimensions of learning styles. Also, a significant interaction was observed between the COI learning model and learning styles on the social skills of students.

[Hartatik, Istiningsih and Purwandari \(2022\)](#) conducted a study to find the “effect of the guided inquiry model based on multiple intelligence towards social skills”. A quasi-experimental design with a non-equivalent control group design was used for the present study. A sample of 30 students (15 students in each experimental and control group) was selected using non-probability sampling with a saturation sampling model. The data was collected through a questionnaire and observation of social skills. The data was analyzed using a mann-whitney test. The findings of the study showed that guided inquiry learning had a positive effect on students’ social skills.

Inquiry-driven instructions were more effective in developing the various social

skills among the learners ([Yadav, 2019](#); [Chandra, Degeng, Kuswandi and Setyosari, 2020](#)). The community-based instructional inquiry was effective in improving social abilities ([Syarifuddin, Setyosari, Sultan, Kuswandi and Sartika, 2020](#)). A guided-driven inquiry was also effective in improving communication abilities ([Wildan, Hakim, Siahaan and Anwar, 2019](#)). The guided-driven inquiry was also effective in enhancing the social abilities of individuals ([Hartatik, Istiningsih and Purwandari, 2022](#)). Inquiry driven instructional method was effective in boosting communication abilities (listening to others, showing respect towards others, getting knowledge towards others), but some individuals faced difficulty in performing their duties, issues in sharing the work, writing reports, and getting a job on time). Whereas one study reported that teachers faced difficulty to motivate the students to share their findings in the social aspect of inquiry-driven instructions ([Jin, Wei, Duran, Guo and Wang, 2016](#)).

Role of Inquiry Based learning to develop Social Skills

Inquiry-based learning is a great strategy for helping pupils to develop social skills.

1. Collaboration: Inquiry-based learning frequently includes group projects in which students work together to investigate issues, solve issues and conduct experiments. Students learn how to work together effectively with others, share tasks, and respect other points of view. They learn skills like active listening and collaboration which are required for effective social relationships.
2. Communication: In inquiry-based learning, students use interactions, discussions, and demonstrations to share thoughts, findings, and viewpoints. They learn how to communicate effectively, pay attention to others, and ask appropriate inquiries. These communication abilities are essential for successful interpersonal interactions across academics and daily situations.
3. Empathy and Perspective-Taking: Inquiry-based learning frequently entails investigating things from many perspectives and taking into account different points of view. Students build empathy through inquiry tasks, which help them to comprehend, appreciate the experiences, feelings, and viewpoints of others. They learn to connect with others from various origins, cultures, and

opinions, which promote greater comprehension and patience.

4. **Problem Solving:** In inquiry-based learning, students are often confronted with issues or challenges that need innovative answers. By dealing with these issues, students learn to think creatively, approach issues from many perspectives, and continue to discover solutions. These problem-solving abilities are extremely useful in social circumstances where people have to manage challenging conversations and solve problems collectively.

5. **Self-Regulation and Conflict Resolution:** In inquiry-based learning settings, students frequently face obstacles and arguments. Through these experiences, individuals learn to control their emotions, manage disagreements wisely, and work effectively with others to settle disagreements. These abilities are essential for developing strong connections and handling social problems in a variety of settings.

Overall, inquiry-based instruction offers an extensive and exciting setting for developing essential social skills required for success in academic, professional, and individual contexts. By encouraging collaboration, interaction, critical thinking,

problem-solving, empathy, and self-regulation.

Conclusion

The instructional framework of inquiry-based learning utilizes the congenial learning atmosphere for students to take an active role in raising concerns, planning and carrying out research. Social skills have significance in this process because they enable students to share information and work in groups for the construction of theory. The successful generation of concepts of students depends upon effectively listening to the opinions of the other group members, waiting for his/her turn, control over emotions while working in groups. Furthermore, inquiry-based learning allows students to acquire and use social skills by working together on projects, sharing viewpoints, and building knowledge collaboratively.

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