



## **Collaborative learning**

### **Background**

The summary below presents the research evidence on collaborative learning in the Arab World context.

The Teaching & Learning Toolkit focuses on impact on outcomes for learners; it presents an estimate of the average impact of collaborative learning on learning progress, based on the synthesis of a large number of quantitative studies from around the world.

This page offers a summary and analysis of individual studies on collaborative learning approach in the Arab world. In contrast to the Toolkit it includes studies which do not estimate impact, but instead investigate the implementation of interventions and how they are perceived by school leaders, teachers and students using a range of research methods. This information is valuable for school leaders and teachers interested in finding out more about particular examples of collaborative learning interventions that have been delivered in the Arab world.

### **Summary of the research in the Arab World**

A limited number of published studies on collaborative learning are available in the Arab world. The few studies that are published indicate that the main purpose of collaborative learning is to shift the teaching and learning from traditional teacher-centered instruction to a student-centered one (Awada & Faour, 2018). It is regarded as a teaching strategy that facilitates the acquisition of a set of skills that students need to meet the demands of the 21st century in order to help them enter an increasingly competitive and tight labor market.

Researchers like Abuhabil and Aswese (2018), Almulla (2016), and Alzayed (2017) highlighted the importance of implementing the cooperative learning strategy as an alternative for traditional teaching methodologies (i.e, lecture style) that can improve students personal and social skills and overall learning. It has been noted that adopting a collaborative learning approach in classrooms provided students



with problem solving techniques, enhanced their skills for self-directed learning, and enhanced their creativity. Moreover, implementing this approach in class facilitated students' construction of knowledge and increased their critical and creative thinking, mainly because it allows them to communicate actively with each other (Hargreaves, Elhawary & Mahgoub, 2020). Data collected from 784 students in 34 lower-secondary science classes in eight public schools in the UAE showed that Collaborative learning improved students' attitudes and perceptions towards subjects perceived to be difficult, like science (Khalil & Aldridge, 2019). It also increased students' engagement with science and elevated their science career aspirations (Chatila & Al Hussein, 2017; Khalil & Aldridge, 2019). Particularly, using Jigsaw as a cooperative learning strategy has significantly improved grade 11 male students' achievement in science when compared with their peers who were taught the same material through the instructions of "traditional teaching" (Alghamdi, 2017).

Furthermore, in a study conducted in Saudi Arabia, 97 male students reported that the collaborative learning approach improved their interpersonal skills and academic performance (Almulla, 2016). Students' motivation and autonomy increased, their thinking and problem-solving skills developed, and they demonstrated higher levels of understanding of the content and long-term retention of information. Moreover, collaborating with other learners produced novel viewpoints and, because of this, it helped refine their collective knowledge with discussion and debate. Al-Balushi and Martin-Hansen (2019) discussed that integrating debating activities as part of collaborative learning developed students' perceptions toward scientific models. Learners' attention seemed to shift toward the scientific construct itself after the debating activity, focusing on its structural orientation and its function as a scientific model.

Findings of another mixed method study conducted in Libya, showed that the collaborative technique improved students' productivity and performance in learning English writing skills (Abuhabil & Aswese, 2018). It provided students with a range of opportunities to share knowledge, support each other's learning, and express ideas and opinions more freely (Abuhabil & Aswese, 2018). Furthermore, it had a great impact on developing students' self-confidence and satisfaction about the subject being learned. Similarly, in an experimental study, eighteen



teachers along with eighteen classes ( $n=374$ ) of grade 8 learners of English as a foreign language were randomly assigned to control and experimental conditions. A cooperative learning differentiated instruction was implemented for eight weeks following three workshops given to participating teachers. The training aimed to provide teachers with the skills need to implement a cooperative learning approach. After participating in several group work activities (i.e, Jigsaw groups, Group Investigation, Student Team Achievement Division (STAD), Numbered Heads Together, Think Pair), students in the experimental group expressed greater satisfaction with the amount of work done and felt more comfortable in conducting and presenting their project than their peers in the control group (Awada & Faour, 2018).

The majority of studies that tackled the collaborative learning approach emphasized the necessity for schools to nurture this collaborative culture inside the classroom due to its benefits on students' engagement in and enthusiasm for learning (Ahmed & Dakhiel, 2019). Pair and group-work seemed to be appropriate activities for teachers to manage even the largest classes (Hargreaves, Elhawary & Mahgoub, 2020). However, both teachers and students in the Arab world are not yet ready to engage with cooperative learning. This is mainly due to the centralized and hierarchical education systems in most of these countries (Albuhairi, 2015). Albuhairi (2015) found out that the overloaded curriculum, lack of resources and educational aids, with insufficient quantity and inadequate quality of teachers training for collaborative learning were the main inhibitors for such transformation of teaching instruction inside the classroom. To this end, teachers in K-12 schools rely heavily on the activities that the textbooks provide for facilitating the collaborative learning among students. Through a mixed-method study, Bouzid (2016) drew the attention of teachers, educational policy makers, and school inspectors to the necessity of selecting textbooks that embed collaborative learning activities focused on real world problems to support students' social and communication skills in real-life situations.

In other cases, collaborative learning approach was found to be implemented for the first time in K-12 classrooms. For instance, in a qualitative study, data was collected from 57 interviews with 81 primary pupils in Alexandria, Egypt. Following this change in delivering instruction, students appreciated the various aspects of



collaborative learning. They benefited from the pair/group work especially when they received support from their peers (sometimes pupils learned better from other pupils than from the teacher), and they seemed to participate more actively and demonstrated an enjoyment of collaborative work (Hargreaves, Elhawary & Mahgoub, 2020).

Generally, when working in pairs or groups, students were more active and motivated than those engaged individually. Students also seemed to agree that adopting the cooperative learning principles leads to social benefits such as an enjoyment in learning, reduction in anxiety, increased confidence, and positive relationships among students (Abuhabil & Aswese, 2018; Almulla, 2016; Alzayed, 2017). All of these gains were to happen if tasks are well communicated and designed in order to avoid having students working on their own or excluded from the task. As such, it is essential that teachers prepare and guide these activities, ensure that every student has a role in the group work, and give regular feedback to students (Hargreaves, Elhawary & Mahgoub, 2020). To this end, Awada and Faour (2018) recommended that school principals to engage teachers in workshops aimed to train them on designing and implementing collaborative lessons. These workshops will assist teachers in monitoring and managing the children during interactive activities.

Collaborative learning appears to work well for all ages if activities are suitably structured for learners' capabilities. However, due to the novelty of this intervention in the teaching and learning environment in the Arab world, further research is recommended to examine and evaluate the collaborative learning adopted by schools and any new initiative in this area. Research is needed to see whether cooperative learning is most likely to be effective when groups include four or fewer students and with similar or mixed ability and achievement groups (Awada & Faour, 2018). Teachers are recommended to conduct action research in their own classroom and experiment with areas that will improve the collaborative learning approach. They could, for example, examine group size, organization of the groups, roles of individuals within groups, and evaluate which tasks will have greater effect on students' interaction and engagement (Hargreaves, Elhawary & Mahgoub, 2020).



**QUEEN RANIA  
FOUNDATION**  
مؤسسة الملكة رانيا



## **Summary**

A limited number of published studies on collaborative learning are available in the Arab world. There is, however, some evidence of promise where the approach has been applied. Studies in Libya, Saudi Arabia, and UAE have examined the effect of the collaborative learning. Reported benefits include interpersonal skills, self-confidence, student attitudes, productivity, alongside academic outputs.

However, researchers have highlighted some potential barriers to implementing collaborative learning approaches in the Arab world. Examples include: the hierarchical education systems, overloaded curriculum, lack of resources and lack of high quality teacher training in the region. Researchers have suggested selecting textbooks that embed collaborative learning activities, as one way of implementing the approach.



## References:

Abuhabil, S. & Aswese, S. (2018). The Importance of Using Collaborative Learning Strategy in Learning English Writing. *Faculty of Arts Journal*, 12, 43-63.

Ahmed, S. A., & Dakhiel, M. A. (2019). Effectiveness of Learner-Centered Teaching in Modifying Attitude towards EFL and Developing Academic Self-Motivation among the 12th Grade Students. *English Language Teaching*, 12(4), 139-148.

Alghamdi, A. (2017). Impact of Jigsaw on the Achievement and Attitudes of Saudi Arabian Male High School Science Students. ProQuest LLC.

Almulla, M. (2016). Students' Perceptions of the Academic and Social Benefits of Working with Cooperative Learning. *Global Journal of Business & Social Science Review*, 4(4), 7-19.

Albuhairi, S. S. A. (2015). *Preliminary factors necessary for effective implementation of cooperative learning, and their prevalence in cooperative learning practice in Saudi Arabia* (Doctoral dissertation, University of Hull).

Al-Balushi, S. M., & Martin-Hansen, L. (2019). The development of students' justifications for their positions regarding two theoretical models: Electron cloud or sodium chloride crystal—After engaging in different learning activities. *Journal of Research in Science Teaching*, 56(8), 1011-1036.

Alzayed, Z.A. (2017). Problem based learning as a practice of cooperative learning in Islamic Education in Bahrain. *11th International Technology, Education and Development Conference*, (10017-10025). INTED 2017 proceedings. Valencia, Spain.

Awada, G. M., & Faour, K. H. (2018). Effect of Glogster and cooperative learning differentiated instruction on teachers' perceptions. *Teaching English with Technology*, 18(2), 93-114.

Bouزيد, H. A. (2016). Boosting 21st century skills through Moroccan ELT textbooks. *Journal of English language teaching and linguistics*, 1(2), 97-108.



Chatila, H., & Al Hussein, F. (2017). Effect of Cooperative Learning Strategy on Students' Acquisition and Practice of Scientific Skills in Biology. *Journal of Education in Science, Environment and Health*, 3(1), 88-99.

Hargreaves, E., Elhawary, D., & Mahgoub, M. (2020). 'One girl had a different idea': children's perspectives on learning and teaching models in the traditional classroom. *Education 3-13*, 48(1), 87-99.

Khalil, N., & Aldridge, J. (2019). Assessing Students' Perceptions of Their Learning Environment in Science Classes in the United Arab Emirates. *Learning Environments Research*, 22(3), 365-386.





**QUEEN RANIA  
FOUNDATION**

**مؤسسة الملكة رانيا**

### **Search Terms**

Collaborative learning, small group instruction, activity units, cooperative learning, group activity, jigsaw, student teams, group learning.

### **Databases searched**

ERIC (EBSCO)

Google scholar

ProQuest Central

PsycINFO