



Within Class Attainment

Background

The summary below presents the research evidence on within class attainment grouping 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 within class attainment grouping 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 within class attainment grouping 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 within class attainment grouping interventions that have been delivered in the Arab world.



Summary of the research in the Arab World

Within-class attainment is a student-centered strategy that would require a grouping of students with similar levels of current achievement in the same class to work together. This strategy can involve the use of other approaches such as collaborative learning or targeted strategies (see Reading comprehension strategies). It is believed that whenever students work together toward a common goal, they achieve more than when working as individuals. That is why the few reported studies below focused on cooperative learning as a main approach used by teachers to ensure a higher achievement for students in these groups.

In a mixed method design, Radhwan (2016) examined the impact of using cooperative learning strategies on promoting students' learning in science classes. The sample comprised forty-one teachers and one hundred and sixty-nine high school students from different private schools in the United Arab Emirates. Through a quantitative questionnaire and class observations, teachers reported that they have good pedagogical knowledge about cooperative learning strategies, and they are familiar with the benefits of this strategy. This teaching practice helped teachers in preparing a rich learning environment filled with discussion, activities, experiments, and critical thinking tasks, which will enable learners to improve their own knowledge through interaction and cooperation with each other. As a result, findings of this study showed gains in students' scientific skills and greater interest in science as a result of implementing this approach by teachers who had high qualifications. Teachers who are highly qualified, demonstrated higher tendency to implement cooperative learning skills and were able to give clear instructions that helped most of the students to work independently until the end of the activity focusing on improving their scientific skills.

In a similar study, Almulla (2017) investigated the perceptions of eight Saudi high school teachers along with their 97 participant-students in years 10, 11 and 12 about cooperative learning. Data collected from semi-structured interviews, a questionnaire and classroom observations indicated that all teachers and the majority of students showed positive attitudes towards cooperative learning and prefer it to lecture-style lessons. This is evident through learners' classroom interaction and behaviors during group work and teacher's observations of students learning and interaction instead of only delivering the instruction to them.



Hence, Almulla (2017) suggested that students also gained social and personal skills benefits (i.e, communication, interpersonal relationships, self-esteem, and problem-solving skills). Findings of the same study suggested that training in cooperative learning is important to help teachers change their practice and their perceptions of classroom roles, responsibility and authority.

Alghamdi (2017) investigated the use of Jigsaw instructional strategy on science achievement and attitudes towards science among 11th grade students in Saudi Arabia. Students (n=50) were equally distributed in an experimental and control groups, matched on the basis of their annual examination at general science scores. Findings of this quasi- experimental study showed that students in the experimental group who were taught using the jigsaw technique performed better on the posttest than their peers in the control group who were taught using the traditional method. Students were able to study the whole topic when they worked together with their teammates and to construct knowledge as they engage in discovering new ideas with each other. In their groups, students had to acknowledge what they were thinking as well as analyze how they think, check what they were thinking, and adjust their thinking to be suitable for the topic and the situation. By doing so, students' understanding increased and their self-esteem was enhanced.

In another quasi-experimental study, Tarazi, (2016) examined the inverted strategy when homework is done by groups of students in an Algebra class with the teacher there to support and guide. Seventy-four eleventh graders in one school in the UAE were divided into experimental and control group and were taught by the same teacher and were given the same lessons, worksheets, exercises, and assessment. Post-test scores results showed that students in the experimental group reported higher achievement but no significant differences between the two groups regarding their motivation for learning Algebra.

Despite the reported benefits of this approach towards students' academic achievement, studies like Alghamdi (2017) and Tarazi (2016) showed that there was no significant change on the students' attitudes or motivation when they were taught using the within class attainment intervention. This is mainly because the sample size is not large enough to produce strong indications of change and the length of the study was not sufficient to show more realistic results. Furthermore, if



schools aimed to reach the highest level of success in implementing the cooperative learning strategies and promoting the academic level of the students, Radwhan (2016) argued that teachers have to receive intensive courses combined with adequate demonstration classes related to cooperative learning strategies. Other challenges and difficulties in implementing this strategy in the classroom are related to the overloaded curriculum and the assessment system which promotes students competitiveness particularly in some context like Saudi Arabia (Almulla, 2017). Additionally, it is argued that this teaching practice demands more time and effort from teachers to re-arrange rows of seats into group islands and could create difficulties moving inside the classroom space whenever the number of students in class is large (Almulla, 2017).

On another note, evidence on within-class achievement grouping indicates less benefit for lower attaining students than others. In a multilevel analysis study, schools from Kuwait and Qatar were participants among the 150 participating schools in 40 countries to determine the association of within group attainment and students reading achievement. Chiu, Chow and Joh (2017) argued that grouping similar students together within a classroom based on past literacy skills (reported by parents), family socioeconomic status (SES) or reading attitudes might affect their reading achievement. Indeed, results of this study revealed that fourth-grade students reading skills improved when they are grouped with classmates with higher reading achievement and stronger past literacy skills. These students benefited from the support of their peers and when they shared ideas and educational resources. Furthermore, when classmates had better reading attitudes, students with lower past literacy skills showed higher reading achievement. That is why, this study implies for teachers to consider this influence between students especially whenever they want to reallocate them into groups to improve their academic achievement.

Overall, there is scarce evidence regarding the impact of within class attainment on academic performance or learning improvement among school students in the Arab world. However, there is some indirect evidence of the positive effects of this type of intervention in other areas of study such as collaborative learning. What has been found is that activities performed in small groups when guided by



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teachers created communities of learning among students and improved their understanding and experiences as a result of learning from each other's error.



Summary paragraph:

Evidence of within class attainment in the Arab world is still inconclusive, however, studies that have taken place have found evidence of promise on improving students' social and academic skills. Studies in Saudi Arabia, UAE, Kuwait, and Qatar reported that this within class attainment grouping provides students with opportunities to improve their learning when interacting with others and learning from errors. Within class attainment grouping was implemented to improve students' understanding in difficult subjects like science and math but also to promote their 21st century skills.

Using cooperative learning/jigsaw and small group discussions are strategies that are found to be mostly beneficial when implementing within class attainment grouping. However, researchers have recommended teachers be more prepared and trained in applying this strategy in the classroom. Furthermore, curricula and assessment in some contexts are considered as potential barriers. Not only that, but when the majority of students in the class are weak, this has a negative impact on the quality of the discussions, interaction and task completion in their groups. To date, research on within group attainment is limited in this region despite the few reported benefits on enriching the effective teaching practice. More research is needed in this area, including using larger sample of students and teachers from various course subjects and from different contexts in the Arab world.

Additionally, experimental and long-term studies are necessary to concentrate on investigating factors in pedagogy that could mostly support the implementation of this strategy and improving students' learning. Exploring students experiences would also prepare teachers for a successful implementation that would better target students' academic needs and support their learning.



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Search Terms

Attainment Group; Ability Group; Homogeneous Group; Heterogeneous Group.

Databases searched

Academic search complete

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