



Homework (secondary)

Background

The summary below presents the research evidence on homework in secondary schools in the Arab World context.

The Teaching & Learning Toolkit focuses on impact of outcomes for learners; it presents an estimate of the average impact of homework in primary schools 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 homework in secondary schools 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 leaders and teachers interested in finding out more about particular examples of secondary school homework interventions that have been delivered in the Arab world.

Summary of the research in the Arab World

Homework for secondary school is mainly considered as being the flipped classrooms activities that are given to students at their own pace. Flipped classroom is a new teaching approach whereby instruction is moved outside the classroom using technology and moving homework and exercises with concepts inside the classroom via learning activities. It was proven to be effective in meeting students' needs and difficulties especially in subjects perceived to be harder like Math (Baki Mohammed Diab, 2016) and science (Al-Derbashi, 2017). Findings of a quasi-experimental method conducted in the United Arab Emirates showed a statistically significant difference in student achievement in the new SAT mathematics skills between two groups of Grade 11 students. Students' mathematical and thinking skills in the experimental group increased in comparison to their peers in the control group who were taught using traditional



teaching methods (Baki Mohammed Diab, 2016). In a similar research design and study context, the impact of employing the flipped classroom strategy in teaching “Laws of Motion” to Grade 11 students’ (n=59) positively impacted their understanding of physics concepts and their attitudes towards physics (Al-Derbashi, 2017). Flipped classroom allowed students to cover the scientific content they missed in class, which resulted in raising their achievement.

Homework given as a flipped classroom strategy increased students’ higher order thinking skills. In a quasi-experimental design with a sample of 67 students; 33 students were assigned to the experimental group, whereas 34 comprised the control group (Almasseri & AlHojailan, 2019). The experimental group was subjected to the flipped classroom approach, whereas the control group was given direct instruction. Measuring the academic achievement and cognitive skills of Grade 8 students in Saudi Arabia in computer science showed a positive effect on the experimental group’s achievement levels with respect to Bloom’s higher order thinking skills, that is, applying, analyzing, and evaluating. Findings of this study also showed that this strategy benefited learners with low prior knowledge more than learners with high prior knowledge.

A majority of research in the Arab world has focused on the impact of flipped learning homework on students achievement particularly on their proficiency in English (Abdelrahman, DeWitt, Alias, & Rahman, 2017; Al-Harbi & Alshumaimeri, 2016; Khadragy, 2016). In the UAE, during an eight-week experiment that covered 18 reading lessons, grade nine students’ (n= 55) reading ability improved when they watched the instructional videos prepared by their teacher at home. Students in the experimental group scored higher on the reading posttest than their peers in the control group. Findings of this study also showed that high achieving students benefited the most from this experiment (Khadragy, 2016).

In Sudan, an exploratory-implementation study was conducted with 28 student volunteers in Secondary Year 1 in two groups, in which only one group used the module the flipped learning (FL) approach where video lectures are assigned as online homework before class, followed by learning activities during class. The analysis of data collected from tests, focus group interviews and online interactions indicated that there was improvement in the students’ writing



proficiency and satisfaction. Findings of this study indicated that the structured presentation of content and activities that were assigned as a homework for students increased their understanding of the content and therefore allowed for more interaction and engagement inside the class. Besides the social engagement which improved the sense of community among the learners, students were cognitively and behaviorally engaged as they responded to the challenges in the learning activities (Abdelrahman et al., 2017). Not only ESL students writing, and reading were improved but also their speaking skills. Basically, the flipped classroom gave secondary school students in Oman the opportunity to practice speaking outside the class and increased their sense of autonomy and independent learning. Findings of this quasi-experimental study were evidence that working on homework materials independently and being monitored regularly tend to be good scaffolding strategies for improving students' speaking skills in English (Alkhoudary & Alkhoudary, 2019).

Evidence showed that pupils are not often given reading assignments as homework especially for the English language (Belabbas, 2015). That is why researchers were interested to investigate ways to increase students achievement in English. For instance, in Saudi Arabia, the flipped classroom strategy was implemented in teaching English grammar to secondary school students. By selecting videos based on the students' textbook and uploading those videos on the Edmodo site before each lesson, students in the experimental group ($n = 20$) were provided with opportunities for active learning interactions. Students were able to learn by themselves and to come to class prepared to ask clarification questions and to practice what they had learned under the teacher's supervision by completing collaborative and competitive tasks in groups or pairs independently. Not only that, but students' grammar performance, perceptions, and attitudes toward learning English were better than their peers in the control group ($n = 23$) who received in-class only traditional teaching. This is mainly because students were given the opportunity to practice the language outside and inside the classroom and the class time was used to for more communicative activities that allow for the practice of grammar in authentic situations (Al-Harbi & Alshumaimeri, 2016). Furthermore, findings of this study are evidence that students' motivation and participation were enhanced, and their self-learning skills and



autonomous learning increased because they were provided with various and multiple materials to explore and learn from.

Effectiveness of flipped classroom strategy was also investigated to measure the achievement and attitudes of tenth graders boys in Islamic education in the United Arab Emirates. Through a semi-experimental design, students' achievement in the experimental group (n=21) outperformed the control group (n=20).

Furthermore, they expressed stronger positive attitudes towards Islamic education when taught through the flipped classroom (Hamad, Alarood, & Alnaqbi, 2017). This means that providing students with opportunities to learn at their own speed and in a suitable time and place before coming to the classroom, helped them bridge the cognitive gap resulting from missing lessons. Not only that, but when the student is given full freedom and enjoyment of learning, their sense of self-reliance and self-esteem raise and their cognitive and emotional motivation increase.

In addition to all these benefits of flipped learning on students' learning, it is regarded by teachers as an approach to transform their role in the classroom and help them face challenges (i.e classroom management, teacher-student communication). In a recent study conducted by Abuhmaid (2020), 126 teachers who were the first in implementing flipped learning in their teaching practices in Amman (Jordan) reported overall positive attitudes toward this model because it improves students' attention in class time and increase their self-confidence when they come to class with basic understanding of the topic. More than that, participants believed that flipped learning makes learning more enjoyable, transforms the learning environment to be more active, and increases students interaction and cooperative learning. As a result, students' motivation to learn improves and their creativity level increases. On the other hand, teachers believed that parents lack of knowledge about flipped learning and limited school infrastructure and internet availability hinder its adoption and implementation. Overall, flipped learning showed to have a positive impact on students' achievement. It also shifts the traditional learning and teachers' role in a classroom. This approach prepares students to the class and therefore impacts their self-confidence, self-reliance, and self-esteem. Teachers valued this approach because it helps them overcome classroom management difficulties and build rapport with students.



Summary paragraph:

Evidence of homework in secondary schools for students' learning outcomes has rarely been investigated in the Arab world. There is some evidence that 'flipped learning' approaches in which students learn content at home and interact with teachers in the classroom may be an effective type of homework and a modern teaching strategy to help teachers shift from the traditional learning towards implementing the student-centered approaches.

Studies in UAE, Oman, Sudan, and Saudi Arabia focused on the value of flipped learning as a tool to improve students' understanding in subjects like math, science, and English increase parental involvement. However, these same studies showed that flipped learning benefited high achieving learners more than the other students.

To date, research on homework in secondary schools is absent in this region despite the general belief of its importance in improving the learning process. More research is needed in this area and investigate ways to improve the quality of the homework and the best means to support teachers implementation in flipped classroom and design in instructional materials.



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Search Terms

Homework; home assignment; take-home; out of school; flipped or inverted classroom; inverted teaching or learning; after school study; secondary education.

Databases searched

Academic search complete

ERIC (EBSCO)

Education Source

Google scholar

ProQuest Central

ProQuest Dissertations

PsycInfo

Web of Science