Overall Results

The paired *t*test compared the pre and post-test means of information overload teaching to the pre and post-test of the chinking theory. The mean of chunking theory post-test score increased only slightly greater than compared to information overload teaching. The standard deviation of the post-test of information overload teaching is 1.92246 and the standard deviation of the post-test mean of the chunking theory is 1.82460. Since both are greater than .05, the means are not statistically significant at the .05 level. Therefore, since the means are not statistically significant, the null hypothesis is accepted based on the results of the ttest test.

Information overload group

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	12.2500	16	1.48324	.37081
	Posttest	25.3125	16	1.92246	.48061

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	16	.789	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pretest - Posttest	-13.06250	1.18145	.29536	-13.69205	-12.43295	-44.225	15	.000

Treatment group

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	11.8125	16	1.55858	.38964
	Post-test	26.5625	16	1.82460	.45615

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test & Post-test	16	.719	.002

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre-test - Post-test	-14.75000	1.29099	.32275	-15.43792	-14.06208	-45.701	15	.000

Based on the results, it can be concluded that the chunking theory is effective compared to the information overload teaching strategy. The mean from the pared samples test information overload teaching strategy post-test is lower (13.06250) than the mean of the post-test used to compare the mean of the chunking theory (14.75000).

Discussion

The results of this study support the chunking theory because it proves that teaching too much information at once is ineffective. The means of the ttest compared the same group of students' post-test results, unit one was taught with the information overload teaching strategy and unit

two was taught using the chunking theory. Since our working memory is limited, it is important for educators to understand the importance of giving students enough time to process new information. According to Mirko Thalmann (2019) “The process of chunking was first described by Miller (1956) as the recoding of several presented stimuli into a single familiar unit or chunk. Miller proposed that chunking is achieved by grouping or organizing a sequence of inputs and recoding it with a concise name.”

Unit one was taught with the information overload teaching strategy, students were told to complete two short answer responses in a full RACECE paragraph without being taught the RACECE in steps. This resulted in a lower mean score compared to when students were taught how to write RACECE paragraphs using the chunking theory. The chunking theory was used to teach unit 2, it allowed students follow the step by step RACECE format which resulted in a higher mean score.

As a recommendation for future research, teachers should try the chunking theory in multiple content subjects to prove that the chunking theory is effective and should be used as go-to teaching strategy for all grade levels. It allows students to gain mastery of a topic before moving on the next part of instruction which makes all the difference in the classroom. In conclusion, the chunking theory maximizes learning time and allows students to process new information at their own pace by mastering a step/topic before moving on to the next one.