Effect of Using Problem Solving Technique of 5Es Instructional Model on Student' Learning at Secondary Level: An Analysis

Sumaira Hassan [ID][1], Jam Muhammad Zafar [ID][2], Shazia Andleeb [ID][3], Naeem Ullah [ID][4]

[1] Ph.D. Scholar, Department of Education, Khwaja Fareed University of Engineering and Information Technology (KFUEIT) Rahim Yar Khan, Punjab, Pakistan. Email: sumairahassan49@gmail.com
[2] Assistant Professor, Department of Education, Khawaja Fareed University of Engineering and Information Technology (KFUEIT), Rahim Yar Khan, Punjab, Pakistan. Email: dr.zafar@kfueit.edu.pk
[3] Assistant Professor, Institute of Humanities & Arts, Khawaja Fareed University of Engineering and Information Technology (KFUEIT), Rahim Yar Khan, Punjab, Pakistan. Email: shazia.andleeb@kfueit.edu.pk
[4] Assistant Professor, Department of Education, Khawaja Fareed University of Engineering and Information Technology (KFUEIT), Rahim Yar Khan, Punjab, Pakistan. Email: dr.naeemullah@kfueit.edu.pk

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ABSTRACT

The study aimed to analyze," Effect of Using Problem Solving Technique 5Es Instructional Model on Student' Learning at Secondary Level". The descriptive part was based on data collected through the questionnaire and the interview protocol from head teachers, teachers and students of class 10th. The experimental part was based on data collected through pre-test and post-test for 9th class students. The (QUAN-QUAL) method was executed and the explanatory sequential method was used. Four 4 Head teachers,16 English Teachers and 400 students200 girls and 200 boys studying in government schools in tehsil and district R.Y. Khan. The stratified sampling technique was implemented. The desired data was collected from Tehsil Rahim Yar Khan. The sample, sampling and sample size of the study was comprised; 4 secondary school head teachers with the same ratio of male and female; 16 secondary school English teachers with the same ratio of male and female; 400 students of secondary classes with the same ratio of male and female. The study found that majority (55%) of respondents agreed that they were interested in using problem solving technique in teaching of English. Mean value 2.94 shows a central tendency towards neutrality with a slight inclination towards agreement, indicating a moderate recognition of the role of interest in learning among respondents. The standard deviation 1.034 indicates moderate variability in responses suggesting that while there was some consensus; opinions on the influence of interest on learning still vary among the respondents. On the basis of these findings researcher presented some recommendations.

Corresponding Author's Email: sumairahassan49@gmail.com

1.   Introduction
1.1.   Overview of the 5Es Instructional Model

The 5E Model, developed in 1987 by the Biological Sciences Curriculum Study, promotes collaborative, active learning in which students work together to solve problems and investigate new concepts by asking questions, observing, analyzing, and drawing conclusions (Asrizal, Yurnetti, & Usman, 2022). The model consists of five key phases: Engage, Explore, Explain, Elaborate, and Evaluate. Each phase serves a distinct purpose in guiding the learning process, ensuring that students actively participate, construct meaning, and apply their knowledge.

1.2.   Engage Phase

The Engage phase is the starting point, aiming to capture students' interest and provoke curiosity. Teachers use engaging activities, real-world scenarios, or thought-provoking questions

to stimulate students' prior knowledge and create a context for the upcoming learning experiences (Mukuka, Balimuttajjo, & Mutarutinya, 2023).

1.3. Explore and Explain Phases

Following engagement, the Explore phase encourages students to investigate and explore concepts through hands-on activities. The explore stage highlights inquiry based knowledge and its function is to raise the discovering intellect by letting learners to perceive, make queries based on theories (Schallert, Lavicza, & Vandervieren, 2022). In explain phase instructors offer plain clarifications by clarifying the conceptions constructed through the clarifications and investigations completed in the course of exploring stage. It includes uninterrupted teaching; aiding learners in constructing an introductory indulgent to the related theme.

1.4. Elaborate and Evaluate Phases

Elaborate phase is structured on attained understanding; it inspires learner to make deeper his indulgent from side to side extra actions, schemes and requests; it also helps in increasing critical-thinking among the learners in different settings. Last phase is known as evaluate phase it encompasses evaluating learners' consideration and talents. Both creative and comprehensive valuations are employed to measure the value of the instruction and knowledge development. Likewise it aids instructors in classifying zones for advance educational enhancements.

Figure 1

2. Theoretical Framework

The arrangement backing a theory is termed as theoretical framework (Ahmad, Farhat, & Abbas, 2024). The 5Es Model supports more than a few instructive theories of instructions which underline dynamic leanings by engaging learner zealous way. Constructivism motivates the model through emphasizing that learning is a self-motivated procedure in which learners dynamically construct understanding somewhat passive way of getting evidence. This model is motivated by empirical educational models like the models suggested by David Kolb, these are emphasizing on the significance of the involvements of experiments, considerations related to the procedure leanings. Model 5Es bring into line with rational model of learning which is admitting significance of rational procedures in getting understanding (Atta, Zafar, & Hussain, 2024; Bhutto, Zafar, & -, 2023). In sequence this model reveals the notion that learning is a continuing procedure beginning from engaging and exploring the understandable clarification. The chronological advancement of this model engrained in Constructivist Movement in which it

is beached in theoretical way (Shafqat, Zafar, & Bhadroo, 2024; Zafar & Ullah, 2020). It expanded extensive acknowledgement due to its capacity of encouraging dynamic leanings and expressive consideration in learners.

2.1. Educational Theories Supporting the 5Es Model

Instructional model 5Es is profoundly embedded in those instructional theories underlining dynamic educational process, learner commitment, and constructivist ideologies. There are some theories which are supporting 5Es theories.

- Constructivism promoted by philosophers Lev Vvgotsky and Jean Piaget which suggests the students dynamically understand the world from side to side involvements, communications, thinking and experiences. Models 5Es with support of constructivism offer well organized structure which provides guidance to the learners by means of inquiry based procedure of investigation (Atta, Zafar, & Hussain, 2024; Bhutto, Zafar, & -, 2023).
- Experimental Learning theory was presented by David Kolb. This theory underlines the significance of practices and experiments in educational procedure. It combines planning stages like exploring and elaborating and it involve learners in observational activities to get understanding in the perspective of real world. Its main function is to promoting understanding and knowledge preservation (Norman, 2021; Shakir, Lone, & Zafar, 2012).

2.2. Importance of Effective Teaching Methods in Secondary Schools

At the secondary schools level education teaching methods are very important because the effective instruction approaches are essential because these increase constructive knowledge setting. In the course of teenage years, learners experience important mental and sensitive growth, creating the period serious difficult for gaining understanding abilities (Ullah et al., 2020). Selection of instruction approaches significantly effects learners' intellectual capacity and evidence protection. In secondary instruction topic knowledge increases, retaining wide-ranging and collaborating instruction approaches. Dynamic instruction approaches are better than outdated lecturing style, including procedures like combined knowledge actions, with technological mixing (Jalbani, Ahmad, & Maitlo, 2023; Yousaf et al., 2021). These approaches provide diverse styles of education and make learners attentive and zealous for acquiring knowledge. Significance of active instruction ranges further than educational endings (Akram et al., 2022; Byrd, 2020; Lone, Shakir, & Zafar, 2011; Mumtaz, Zafar, & Andleeb, 2024). At secondary school stage learners improve their critical-thinking, problem solving and abilities of communicating for forthcoming events (Rasheed, Zafar, & Shaheen, 2024). The talent of the instructor is to make all-encompassing, compassionate and motivating educational situation which considerably helpful for learners' growth in general.

2.3. Effective Teaching Models

Models of instructions are providing significant understandings effectively to those methodologies which are indicating inspiring results in the secondary level instruction. There are numerous methods of instructions which are becoming popular day to day due to the positive influence on the learners instructions, learners commitment, and learners achievement (Arshad et al., 2024). In these instructions models one important is the flipped classrooms in which where old-style instruction approaches are reversed. Learners involve to the subjects of instructions outdoor lecture hall from end to end prerecorded lectures, interpretations, audiovisual aid, permitting lecture period to lively debates, problem solving and applied performance (Rao, Jeevan, & Ahmad, 2023; Zaidi, Ullah, & Zafar, 2023). There is one more model known as inquiry based learning method it is also very effectively working through support of the constructional viewpoints. Inspiring learners to make queries, explore themes and assumptions from side to side events by stimulating critical-thinking and profound cognize related to theme (Hina, Zafar, & Naeemullah, 2023; Nawaz et al., 2022). Another method which is known as project based learning method comprises learners' comprehensive and practical plans by developing alliance, ingenuity and problem solving talents; by creating knowledge additional expressive and appropriate for learners' (Munawar et al., 2024; Ramzan, Zafar, & Hussain, 2023). Model of differentiated instructions identifies and provide various knowledge necessities in distinct class room setting Adapting this modal of education improves capabilities, likings and commitment which leads to the educational accomplishment (Mohiman, Ullah, & Zafar, 2024; Zafar & Akhtar, 2023). The current literary works underlines the effect of technological mixture in instruction. Computer-generated replications, accessible properties and communicating equipment's are contributing self-motivated and modified culture practices at secondary level instruction (Cheema

et al., 2023; Rasheed, Zafar, & Shaheen, 2024). The above literature of review highlighted the significance of effective teaching models used in secondary level instruction for improving learners' knowledge. Through the usage of these models of instructions educationists can improve students' leanings and can provide better results (Mughal, Zafar, & Ullah, 2023; Sadaf, Rasheed, & Ahmad, 2024; Shahabuddin & Zafar, 2024).

2.4. Research Objectives
1. The first objective is to refer to the effect of 5E instruction model on learners' education and metacognitive abilities on secondary levels.
2. To find out how gender differs in the acquisition of metacognitive abilities using 5E instructional
3. To explore students learning capacities using 5e instructional model of science
4. To analyses the effect of activities prepared in accordance to the 5E instructional model on students' success in a school

2.5. Research Questions
- How does the 5E instructional paradigm impact students' learning and meta cognitive skills at secondary level?
- How do the gender can be different in developing meta cognitive skills using 5E instructional?
- How we can access the students' learning capacities using 5e instructional model of science?
- To recommend certain measures for the effect of 5Es instructional model on students learning at secondary level in District Rahim Yar Khan

3. Research Methodology
"The research methodology is the procedure which is used by the researchers to gather data for resolving problems of investigation" (Ahmad, Farhat, & Abbas, 2024). The study was survey, descriptive and experimental in nature. The descriptive part was based on data collected through the questionnaire and the interview protocol from head teachers, teachers and students of class 10th. The experimental part was based on data collected through pre-test and post-test for 9th class students. The quantitative as well as qualitative (QUAN-qual.) method implemented for the planned study. The explanatory sequential technique was implied. The term population, as used in research, refers to all the members of a particular group. It is group of interest to the researcher, the group to whom the researcher would like to generalize the result of study (Maitlo et al., 2023; Yousaf et al., 2021). Population of study comprised of head teachers (HT) of the secondary schools, secondary school teachers (English) (SSTs), students of secondary classes (SSCs). Four 4 Head teachers, 16 English Teachers and 400 students (200 girls and 200 boys) studying in Government Schools in Tehsil and District Rahim Yar Khan. Sample may be any part of population of individual on whom information is obtained. Sampling is the process of selecting individuals who participate in research study. "the selection of specific data sources from which data are collected to address the research objectives." (Gentles et al., 2015).

Table 1: Sampling Chart

Secondary Schools	Head teachers	Teachers	Students	Total
GBHS.1	1	4	100	105
GBHS.2	1	4	100	105
GGES.1	1	4	100	105
GGHS.2	1	4	100	105
Total	4	4	400	420

Source: http//:www.google.com dated 20-08-2024.

The sample size is a term used in market research for defining the number of subjects included in a sample size. The stratified sampling technique was adopted for the study. The desired data was collected from Tehsil Rahim Yar Khan. The sample, sampling and sample size of the study was comprised; 4 secondary school head teachers with the same ratio of male and female; 16 secondary school English teachers with the same ratio of male and female; 400 students of secondary classes with the same ratio of male and female.

4. Data Analysis

Table 2: Factor: Problem Solving Techniques

RSP	Stat.	SDA	DA	UD	A	SA	Total	SD	Mean
Item.1	F	17	16	72	100	215	420	1.201	3.744
	0%	4%	4%	17%	24%	51%	100%		
Item.2	F	23	41	126	116	114	420	1.397	3.867
	%	5%	10%	30%	28%	27%	100%		
Item.3	F	32	45	102	105	136	420	1.307	3.692
	%	8%	11%	24%	25%	32%	100%		
Item.4	F	30	71	122	90	107	420	1.169	3.362
	%	7%	17%	29%	21%	25%	100%		
Item.5	F	50	58	89	107	116	420	1.332	3.372
	%	12%	14%	21%	25%	28%	100%		
Item.6	F	40	63	98	81	138	420	1.286	3.138
	%	10%	15%	23%	19%	33%	100%		
Item.7	F	21	61	105	112	121	420	0.983	3.412
	%	5%	15%	25%	27%	29%	100%		
Item.8	F	37	61	91	94	137	420	1.034	2.943
	%	9%	15%	22%	22%	33%	100%		
Total	F	250	416	805	805	1084	3360	1.213	3.44
	%	9%	13%	22%	24%	32%	100%		

Table 2: illustrated the Indicator.1: Problem Solving Techniques. The data revealed that 32% Head teachers, teachers and students strongly agreed about adopting Problem Solving Techniques and 24% agreed. While 13% of respondents disagreed and 8% strongly disagreed with the statement whereas 22% of respondents were undecided. Collectively, majority 56% (32%+24%) of respondents agreed about indicator.1 problem solving techniques. The standard deviation 1.213 and mean value of 3.44 supported.

Table 3: Gender-based Analysis: Factor: Problem Solving Techniques

Items	Gender	N	Statistics				
			Mean	SD	T-value	df	Sig.
ISW	Male	210	4.147	1.145	-.135	418	.053
	Female	210	4.161	1.013	-.135	412	
2.KOI	Male	210	3.676	1.089	1.195	418	.151
	Female	210	3.542	1.194	1.195	414	
3. GOI	Male	210	3.857	1.205	3.517	418	.140
	Female	210	3.433	1.263	3.517	417	
4.TEL	Male	210	3.676	1.132	4.902	418	.778
	Female	210	3.109	1.234	4.902	415	
5.GRI	Male	210	3.795	1.190	5.739	418	.002
	Female	210	3.071	1.386	5.739	409	
6.COI	Male	210	3.714	1.215	3.177	418	.008
	Female	210	3.304	1.418	3.177	409	
7.JUS	Male	210	3.657	1.184	1.027	418	.996
	Female	210	3.538	1.190	1.027	418	
8.LIT	Male	210	3.781	1.267	3.715	418	.252
	Female	210	3.309	1.332	3.715	417	
Total	Male	210	3.787	1.178	2.892	418	2.857
	Female	210	3.558	1.253	2.892	418	

Table 3: Gender Analysis: Indicator 1 - Problem-solving Approaches. When evaluating the data, it showed the following:

For 1.ISW, the average score for males was 4.147, and for females, it was 4.161. This suggested that female teachers had a better understanding of their strengths and weaknesses compared to male teachers. The standard deviation was 1.145, t-value was -0.135, degree of freedom was 418, and the significance level was 0.053. In 2.KOI, the data indicated that the mean score for males was 3.676, and for females, it was 3.542. This implied that male teachers had a clearer grasp of crucial information compared to female teachers. The standard deviation was 1.089, t-value was 1.195, df was 418, and Sig. was 0.151. For 3. GOI, the analysis revealed that the average score for males was 3.857, while for females, it was 3.433. This indicated that males outperformed females. The standard deviation was 1.205, t-value was 3.517, df was 218, and Sig. was 0.140. In 4.TEL, the mean score for males was 3.676, and for females, it was 3.109. This suggested that males performed better than females. The standard deviation was 1.132, t-

value was 4.902, df was 418, and Sig. was 0.778. Lastly, for Category 5, the average score for males was 3.795, and for females, it was 3.071. This showed that males excelled more than females. The standard deviation was 1.190, t-value was 5.739, df was 218, and Sig. was 0.002. Entry 6: The analysis had revealed that the mean value for males in the category was 3.714, while for females, it was 3.604, indicating that males had outperformed females in that category. The standard deviation had been 1.215, t-value had been 3.177, degrees of freedom had been 218, and the significance level had been 0.008. Entry 7: In this category, the mean value for males had been 3.657, and for females, it had been 3.538, suggesting that males had performed better than females in that category. The standard deviation had been 1.184, t-value had been 1.027, df had been 218, and Sig. had been 0.996. Entry 8: The data analysis had shown that the mean value for males in the category was 3.781, while for females, it was 3.309, indicating that males had excelled more than females in that category. The standard deviation had been 1.267, t-value had been 3.715, df had been 218, and Sig. had been 0.252. Overall, the collective data analysis had indicated that the mean value for males in the category was 3.787, and for females, it was 3.558, showing that male teachers had preferred problem-solving techniques over females in that category. The standard deviation had been 1.178, t-value had been 2.892, df had been 218, and Sig. had been 0.857.

Table 4: Locality-based Analysis: Factor: Problem-solving techniques

| Items | Locality | N | Statistics | | | | |
			Mean	SD	T	Df	Sig.
1.ISW	Urban	218	4.160	1.014	.114	418	.053
	Rural	202	4.148	1.149	.113	402	
2.KOI	Urban	218	3.513	1.188	-1.787	418	.126
	Rural	202	3.712	1.086	-1.794	418	
3.GOI	Urban	218	3.454	1.259	-3.289	418	.181
	Rural	202	3.851	1.212	-3.294	417	
4.TEL	Urban	218	3.128	1.211	-4.744	418	.767
	Rural	202	3.678	1.159	-4.752	418	
5.GRI	Urban	218	3.133	1.389	-4.898	418	.002
	Rural	202	3.757	1.207	-4.924	417	
6.COI	Urban	218	3.344	1.429	-2.658	418	.002
	Rural	202	3.688	1.203	-2.675	415	
7.JUS	Urban	218	3.578	1.189	-.352	418	.895
	Rural	202	3.618	1.187	-.352	416	
8.LIT	Urban	218	3.325	1.340	-3.591	418	.148
	Rural	202	3.782	1.258	-3.599	418	
Total	Urban	218	3.454	1.252	-2.650	418	0.331
	Rural	202	3.780	1.182	-2.659	418	

1. ISW: The data analysis showed that the mean score for urban areas was 4.160, while the mean score for rural areas was 4.148, suggesting that urban areas performed slightly better. The standard deviation was 1.014, the t-value was 0.114, degrees of freedom (df) were 418, and the significance level (Sig.) was 0.053, which supported this conclusion.

2. KOI: The analysis revealed that the mean score for urban areas was 3.518, whereas the mean score for rural areas was 3.712, indicating that rural areas outperformed urban ones. The standard deviation was 1.086, the t-value was -1.794, df was 418, and Sig. was 0.126, supporting these results.

3. GOI: The data indicated that the mean score for urban areas was 3.454, compared to 3.851 for rural areas, reflecting better performance in rural areas. The standard deviation was 1.212, the t-value was -3.294, df was 218, and Sig. was 0.181, which confirmed this result.

4. TEL: The analysis demonstrated that the mean value for urban areas was 3.128 and for rural areas was 3.678, indicating higher performance in rural areas. The standard deviation was 1.159, with a t-value of -4.752, df at 418, and Sig. at 0.767, supporting this finding.

5. GRI: The mean score for urban areas was found to be 3.133, while for rural areas, it was 3.757, suggesting that rural areas performed better. The standard deviation was 1.207, the t-value was -4.924, df was 218, and Sig. was 0.002, confirming this analysis.
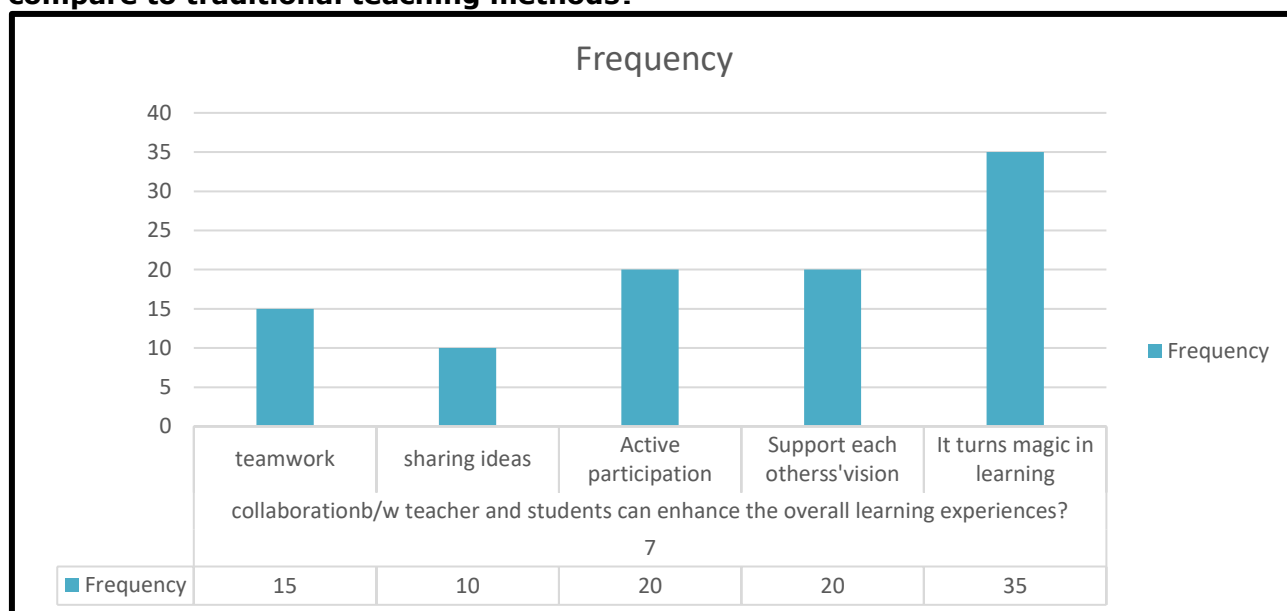
6. COI: The analysis indicated a mean score of 3.344 for urban areas and 3.688 for rural areas, showing better performance in rural areas. The standard deviation was 1.203, the t-value was -2.675, df was 218, and Sig. was 0.002, which supported this conclusion.

7. JUS : It was observed that the mean value for urban areas was 3.578, while for rural areas, it was 3.618, indicating slightly better performance in rural areas. The standard deviation was 1.187, the t-value was -0.352, df was 218, and Sig. was 0.895, which confirmed these findings.

8. LIT: The data showed that the mean score for urban areas was 3.325 and for rural areas was 3.782, suggesting that rural areas performed better. The standard deviation was 1.258, the t-value was -3.599, df was 218, and Sig. was 0.148, supporting this conclusion.

Overall Analysis: When all findings were combined, the mean score for urban areas was 3.454, while for rural areas, it was 3.780, indicating that rural areas performed better overall. The standard deviation was 1.182, the t-value was -2.659, df was 218, and Sig. was 0.331, which supported the overall conclusion.

Figure 1: Q.1 How do you think the 5es instructional model enhances students learning compare to traditional teaching methods?

	teamwork	sharing ideas	Active participation	Support each otherss'vision	It turns magic in learning
Frequency	15	10	20	20	35

collaborationb/w teacher and students can enhance the overall learning experiences?
7

Graps.1: presents collaboration between teachers and students. Data indicated that 35% of school head teachers, teachers and students opined that it turns a magic in learning, 20% believe in active participation while 20% support each other's' vision whereas 10% have faith in sharing ideas and also 15% were in support of team work.

4.1. Findings
- 56% (38%+18%) of respondents were agreed that they recognize their intellectual strengths and weaknesses. Mean 3.744 implies a generally positive agreement and 1.201 indicates a moderate level of variability in responses, suggesting that while most respondents lean towards agreement.
- 66% (46%+20%) of respondents were agreed that they know what kind of information is most important to learn. Mean value of 3.867 indicates a generally positive attitude towards understanding important information, and the standard deviation of 1.397 shows a moderate variability in responses, signifying diverse opinions but with a tendency towards agreement.
- 57(32+25) were agreed that they were good at organizing information. Mean value of 3.692 indicates an overall positive inclination towards agreement, indicating that respondents generally perceive themselves as capable of organizing information and standard deviation 1.307 points to moderate variability in responses, suggesting a range of opinions but with a general tendency towards agreement.

- 29% respondents were undecided that they are understanding of what their teacher expects them to learn. Mean value of 3.362 suggests a central tendency towards agreement, indicating a general but not overwhelming confidence among respondents about understanding their teacher's expectations. The standard deviation of 1.169 indicates moderate variability in responses, suggesting that while there is a tendency towards agreement; opinions on this issue vary among respondents.
- Mean value of 3.372 suggests a general tendency towards agreement, indicating that respondents overall perceive themselves as capable of remembering information. The standard deviation of 1.332 indicates moderate variability in responses, suggesting a range of opinions but with a general inclination towards agreement.
- Majority 52% (33+19) respondents were agreed that that they have control over their learning. Mean value of 3.138 suggests a central tendency towards slight agreement, indicating that, on average, respondents believe they have some control over their learning. Standard deviation of 1.286 indicates moderate variability in responses, suggesting a range of opinions with a general inclination towards agreement.
- Majority 56% (29+27) respondents were agreed that they were good judge of how well they understand something. Mean value of 3.412 suggests a general tendency towards agreement, indicating that respondents overall perceive themselves as capable of accurately assessing their understanding. The standard deviation of 0.983 indicates relatively low variability in responses, suggesting that most respondents' perceptions are clustered around the mean, with a general consensus leaning towards agreement.
- Majority 55% (33+22) of respondents agreed that they are interested in topic. Mean value of 2.943 suggests a central tendency towards neutrality, with a slight inclination towards agreement, indicating a moderate recognition of the role of interest in learning among respondents. The standard deviation of 1.034 indicates moderate variability in responses, suggesting that while there is some consensus; opinions on the influence of interest on learning still vary among the respondents.
- 35% of school head teachers, teachers and students opined that it turns a magic in learning, 20% believe in active participation while 20% support each other's' vision whereas 10% have faith in sharing ideas and also 15% were in support of team work.
- 35 responses suggest that many see collaboration as transformative. "Support each other's vision" and "Active participation" both with 20 responses are also viewed as important benefits, promoting mutual support and engagement. "Teamwork" 15 responses and "Sharing ideas"10 responses are valued aspects, though they are seen as less impactful. Overall, the chart indicates that collaborative efforts are perceived to greatly improve the learning process.

5.   Discussion

The study highlighted that the first indicator focused on problem-solving techniques. The findings revealed that a majority of head teachers, secondary school teachers, and students from secondary classes believed that students are aware of their intellectual strengths and weaknesses. Most respondents, including head teachers, secondary school teachers, and students, felt that students understand which information is most crucial to learn. Additionally, there was a consensus among head teachers, teachers, and students that they are proficient in organizing information effectively. Furthermore, the majority of head teachers, secondary school teachers, and students agreed that students have a clear understanding of what their teachers expect them to learn. A substantial portion of head teachers, secondary school teachers, and students also expressed confidence in their memory skills. Moreover, most respondents believed they have control over their learning processes, reflecting a strong sense of self-efficacy. Many head teachers, secondary school teachers, and students considered themselves good at assessing their own understanding. Lastly, there was a general agreement among head teachers, secondary school teachers, and students that they show interest in the subject matter.

6.   Conclusion

First indicator of the study was related to problem-solving techniques suggest that both teachers and students value self-awareness in learning. Students appear to know their strengths and weaknesses, which is essential for effective learning. Recognizing important information helps students focus their efforts, and their ability to organize this information supports better retention and comprehension. The positive view of memory skills and learning control indicates strong self-efficacy, which is linked to better academic outcomes. The ability to accurately assess

understanding reflects good metacognitive skills, crucial for learning and problem-solving. Overall, the study highlights a supportive learning environment where students and teachers are actively engaged in the educational process.

6.1. Recommendations
The study recommended that:

- The problem-solving techniques are very important for students' analytical and creative learning especially at secondary school level. The study recommended that secondary school teachers may be focused to use problem-solving techniques during teaching for students' analytical and creative learning.
- By teaching practical skills like analysis, decision-making, and logical reasoning, problem-solving prepares students for real-life situations they will face outside the classroom.
- Engaging in problem-solving activities can increase motivation by making learning more interactive and stimulating, helping students stay focused and interested.
- Collaboration between teachers and students can enhance learning Foster an open, supportive classroom environment.
- Encourage clear, two-way communication.

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