Original Research Article

Research On the Life-Long Learning Competencies of Secondary School Students

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ABSTRACT

A significant desire to promote Life-Long Learning (LLL) competencies from an early stage in the educational system, with its important components being motivation, self-regulated learning, & co-curricular activities in cultivating healthy learning. However, generally speaking, it is not currently thought that schools are successful in analytically instilling inspiration, self-directed learning, and learning skills for extracurricular activities. The following questions were the focus of this essay: How well-rounded are Erode students' Life-Long Learning competencies for the future? Is there a relationship between students' LLL and their extracurricular activities? Can students' perceived classroom structure & the school predict their LLL? This study examines the Life-Long Learning abilities of secondary school students and how they relate to academic success and classroom organisation. For this work, both primary and secondary data were gathered. 82 kids from private and public schools make up the sample. Secondary school students were surveyed systematically to get primary data. Secondary information was gathered from reports and school websites. For statistical analysis, SPSS was used, and techniques like percentage analysis, correlation, and the "z" test were applied. Results were analysed in light of the research hypothesis, the demographic profile, & different aspects of secondary school students' LLL competencies & the relationship to academic achievement and classroom structure.

Keywords: Interest, Cocurricular activities, Self-efficacy, Performance approach, Deep-level strategies, Surface-level strategies;

Introduction

This study aims to acquire knowledge into Erode students' Life-Long Learning(LLL) competencies. Which are they, & for what reason would they say they are of significance? In a workplace characterized by increasingly rapid change, future representatives will demand a higher level of flexibility & motivation for learning. Erode has quickly started moving from an industrialized to a knowledge-based economy in recent decades.

The European Commission offers the most thorough definitions of LLL. (2001, p. 9): Life-Long Learning is "all learning exercises, undertaken all over life, to develop knowledge, abilities, and capability within a personal, civic, social, and employment-related perspective." When defined as such, LLL is not a novel idea, but it does broaden our theoretical outlook by introducing a life expectancy approach to learning.

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It is critical to focus research on two key points: inspiration (e.g., Heckhausen & Gollwitzer, 1987; Wigfield & Eccles, 2000) and self-regulated learning procedures due to the wide range of literature and the lack of a psychological theory based on LLL (e.g., Zimmerman, 2000; Schmitz & Wiese, 2006).

New technology and plans of action have brought a need for creative thinkers' employees with a development attitudeEach teacher's strategy should include encouraging the development of innovative skills in the classroom as a way to help kids acquire the 21st-century abilities they'll need to succeed in the future.

Implementing project-based learning is one way to include these skills in the classroom. More and more students are thinking about how to have a positive impact on society. Utilize this zeal and assign the kids a project that addresses a current cultural issue. In this way, the school will encourage pupils to come up with creative solutions to this problem. Additionally, kids will gain some crucial planning skills, learn how to work effectively with others, and organise and share their opinions.

Developing pupils' critical thinking skills may help them become LLL. Students' advantage, interest, and curiosity will be stimulated by being exposed to a variety of ideas and knowledge, and their inner critic will have something to think about for the rest of their lives.

With many educators increasingly placing a strong emphasis on students' individual learning, the traditional classroom is being turned on its head. Increasing pupils' independence will give them the resources and self-assurance they need for LLL.

It is typical for the teacher to stand at the front of the class and provide feedback and reflection on the day's learning. Reducing "instructor speak" is an excellent technique to do this. This, however, may occasionally encourage pupils to remain seated and not participate in class. In the classroom, setting objectives or goals is a great way to inspire and involve students in the learning process.

Review Of Literature

Given all of this, it is crucial to take the school setting into account while evaluating LLL competencies. Teaching quality is one important factor that interacts with individual LLL competencies (Van de Grift, 2007).

The necessity to portray different learning methods in the classroom arises from the fact that students are brilliant in various ways and have various learning philosophies (Hudson 2009).

We can better understand constructivist points of view on learning, implement student-centred approach to instruction, & appreciate the separated educational plan, teaching, and assessment paradigms by viewing learners' minds as perplexing frameworks with heterogeneous natures.

The capacity to approach situations and issues from new angles, come up with fresh concepts, and come up with original, elaborate solutions are all examples of creative thinking (Sternberg 2011). Creativity is emphasised as a necessary skill for success in educational

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programmes all around the world (e.g., Curriculum Development Council 2007; British Columbia's Ministry of Education 2012).

Both Western and Asian educational systems emphasise these skills in their educational plan regulations (e.g., same as above).

Research Methodology

Need Of The Study

In recent decades, Erode has quickly started to transition from an industrial to knowledge-based economy. So, at the start of this procedure, Erode unveiled its official Life-Long Learning strategy. Discussions of constant learning were first mostly focused on the commercial environment. There is, however, a strong drive to encourage lifelong learning skills earlier in the educational system.

Objectives Of Study

- 1. The following goals for the research have been set:
- 2. 1. To investigate the LLL proficiency levels of secondary school pupils.
- 3. 2. To learn more about the sociodemographic makeup of the secondary students.
- 4. 3. To examine several aspects of students' LLL competencies in secondary schools.
- 5. 4. To get helpful advice for improving the LLL proficiency of high school students.

Research Design

The study's planned research design is of the "Descriptive" variety. This kind of study focuses on student response quality, self-awareness, emotion management, etc. The researcher tries to analyse the various aspects of secondary school students' LLL competencies in this paper, including co-curricular activities, interest, performance approach, surface-level strategies, self-efficacy, deep-level strategies, & achievement levels. Consequently, descriptive design was used.

Data Collection

There were two techniques of gathering data.

- i. Primary data: Questionnaire survey method based on a pilot study was used to gather the primary data. The main information was acquired recently and for the first time. It is first-hand information gathered from secondary pupils in Erode, Tamil Nadu, India, using a planned schedule.
- ii. Secondary data: To supplement the research, secondary data was gathered from websites, journals.

Research Hypothesis

- 1. A substantial relationship between respondents' ages and certain LLL competences of secondary school students.
- 2. A sizable inter-correlation matrix among the various LLL competences of secondary school pupils.

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- 3. The gender of respondents and the various LLL competences of secondary school students varies significantly.
- 4. The type of school attended by respondents and the various LLL competences of secondary school students varies significantly.
- 5. There is a substantial correlation between respondents' family structure and several LLL competency measures among secondary school students.
- 6. There are significant differences between respondents' domiciles in terms of the various LLL competencies of secondary school students.

Sampling Techniques

Sample size is 82. Students in Erode's public and private schools provided sample data. Disproportionate stratified sampling is a type of stratified sampling in which the proportion of each stratum's sampled elements to the population as a whole is not maintained. As a result, sample inclusion is not distributed equally among population components.

Analysis Of Data

Here we analyzes the collected data using correlation test, percentage analysis, intercorrelation matrix, ANOVA-test and z test.

Table 1: Karl Pearson's Co-Efficient of Correlation between Respondents' Age and various dimensions of secondary school students' LLL competencies

S.No	Secondary School Students' LLL Competencies	Correlation Value	Statistical Interface
1.	Co-curricular Activities	0.598**	p<0.01 Significant
2.	Performance approach	0.615**	p< 0.01 Significant
3.	Interest	0.685**	p< 0.01 Significant
4.	Self-efficacy	0.643**	p< 0.01 Significant
5.	Surface-level strategies	0.646**	p< 0.01 Significant
6.	Deep-level strategies	0.642**	p< 0.01 Significant
7.	Achievement level	0.640**	p< 0.01 Significant
8.	Overall Secondary school students' LLL competencies	0.670**	p< 0.01 Significant

^{**} Correlation is significant at the 0.01 level

Table 1 shows a significant relationship between respondents' ages and various secondary school students' LLL competencies, including extracurricular activities, performance approach, interest, self-efficacy, surface-level strategies, deep-level strategies, achievement level, and overall LLL competencies.

Table 2: Inter correlation matrix among various dimensions of secondary school students' LLL competencies

^{*} Correlation is significant at the 0.05 level

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	Co-curricular activities	Performance approach	Interest	Self-efficacy	Surface-level strategies	Deep-level strategies	Achievement level	Secondary school
Co-curricular activities	1							
Performance approach	.892**	1						
Interest	.830**	.916**	1					
Self-efficacy	.863**	.899**	.899**	1				
Surface-level strategies	.887**	.939**	.918**	.914**	1			
Deep-level strategies	.743**	.882**	.895**	.932**	.902**	1		
Achievement level	.862**	.962**	.930**	.908**	.927**	.905**	1	
Secondary school students' LLL competencies	.868**	.965**	.960**	.932**	.970**	.933**	.960**	1

^{**} Correlation is significant at the 0.01 level

Table 2 shows a very significant association between the numerous LLL abilities of secondary school students, including co-curricular activities, interest, performance approach, surface-level tactics, self-efficacy, deep-level strategies, & achievement level, at the 0.01 level.

Table 3: 'z' test between the respondents' type of School and various dimensions of secondary school students' LLL competencies.

S.No	Secondary school students' LLL competencies	$\bar{\mathbf{x}}$	S.D	Statistical Inference
1.	Co-curricular activities			z =4.950
	Private (N:57)	18.7018	2.95178	p < 0.001
	Government (N:25)	21.6800	0.80208	Significant
2.	Performance Approach			z =5.358
	Private (N: 57)	18.9825	2.46034	p < 0.001
	Government (N:25)	21.6800	0.74833	Significant
3.	Interest			z=5.871
	Private (N:57)	18.7368	2.78726	p<0.001
	Government (N:25)	22.0400	0.45461	Significant
4.	Self-Efficacy			z=6.022
	Private (N:57)	19.4737	2.74581	p<0.001

^{*} Correlation is significant at the 0.05 level

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	Government (N:25)	22.8800	0.97125	Significant
5.	Surface-level Strategies			z = 5.037
	Private (N:57)	18.5965	3.09296	p < 0.001
	Government (N:25)	21.7600	0.72342	Significant
6.	Deep Level Strategies			z=5.898
	Private (N:57)	18.8070	2.98471	p<0.001
	Government (N:25)	22.4800	1.29486	Significant
7.	Achievement Level			z=6.284
	Private (N:57)	19.4386	2.54262	p<0.001
	Government (N:25)	22.7200	0.84261	Significant
8.	Overall Secondary School Students'			z=5.597
	LLL Competencies	134.58	14.44565	p<0.001
	Private (N:57)	151.04	3.75810	Significant
	Government (N:25)			

The secondary school students' LLL competencies, including co-curricular activities, interest, performance approach, surface-level tactics, self-efficacy, deep-level strategies, & achievement level,& overall LLL competencies, are significantly correlated with the respondents' choice of school, as shown in **Table 3.**

Table 4: 'z' test between the respondents' gender and various dimensions of secondary school students' Life-Long Learning (LLL) competencies.

S.No	Secondary School Students' LLL Competencies	x	S.D	Statistical Inference
1.	Co-Curricular Activities			z=4.950
	Male (N:40)	18.1500	3.38587	p<0.001
	Female (N:42)	21.0000	1.03594	Significant
2.	Performance Approach			z =5.358
	Male (N:40)	18.4750	2.78262	p < 0.001
	Female (N:42)	21.0714	0.97262	Significant
3.	Interest			z =5.871
	Male (N:40)	17.9250	2.94729	p < 0.001
	Female (N:42)	21.4762	0.89000	Significant
4.	Self-Efficacy			z =6.022
	Male (N:40)	18.9500	3.12927	p < 0.001
	Female (N:42)	22.0000	1.34346	Significant
5.	Surface-Level Strategies			z =5.037
	Male (N:40)	17.8750	3.42829	p < 0.001
	Female (N:42)	21.1667	1.01011	Significant
6.	Deep-Level Strategies			z =5.898
	Male (N:40)	18.1250	3.32965	p < 0.001
	Female (N:42)	21.6429	1.46206	Significant
7.	Achievement Level			z =6.284
	Male (N:40)	18.8500	2.76934	p < 0.001
	Female (N:42)	21.9524	1.30575	Significant
8.	Overall Secondary school students' LLL			z =5.597
	competencies	130.48	15.4770	p < 0.001
	Male (N:40)	148.29	1	Significant
	Female (N:42)		4.66584	

Table 4 shows a significant relationship between respondents' gender and various LLL competencies among secondary school students, including co-curricular activities, interest, performance approach, surface-level tactics, self-efficacy, deep-level strategies, & achievement level, & overall LLL competencies.

Table 5: 'z' test between the respondents' type of family and various dimensions of secondary school students' LLL competencies.

S.No	Secondary School Students' Life-Long Learning (LLL) Competencies	x	S.D	Statistical Inference
1.	Co-Curricular Activities			z =9.121
	Joint (N:20)	16.0500	2.85574	p < 0.001
	Nuclear (N:62)	20.7581	1.65644	Significant
2.	Performance Approach			z =9.546
	Joint (N:20)	16.7000	1.59275	p < 0.001
	Nuclear (N:62)	20.8065	1.69704	Significant
3.	Interest			z =12.282
	Joint (N:20)	15.8000	1.28145	p < 0.001
	Nuclear (N:62)	21.0161	1.75080	Significant
4.	Self-Efficacy			z =9.863
	Joint (N:20)	16.8500	2.30046	p < 0.001
	Nuclear (N:62)	21.6935	1.77033	Significant
5.	Surface-Level Strategies			z =10.396
	Joint (N:20)	15.6000	1.93037	p < 0.001
	Nuclear (N:62)	20.8387	1.96855	Significant
6.	Deep-Level Strategies			z =9.978
	Joint (N:20)	15.9000	1.37267	p < 0.001
	Nuclear (N:62)	21.2258	2.25010	Significant
7.	Achievement Level			z =8.769
	Joint (N:20)	17.2000	1.67332	p < 0.001
	Nuclear (N:62)	21.4839	1.96479	Significant
8.	Overall Secondary school students' LLL competencies			z =11.805
	Joint (N:20)	119.55	7.03731	p < 0.001
	Nuclear (N:62)	146.06	9.19884	Significant

Table 5 shows a significant relationship between respondents' family type and various secondary school students' LLL competencies, including co-curricular activities, interest, performance approach, surface-level tactics, self-efficacy, deep-level strategies, & achievement level, & overall secondary school students' LLL competencies..

Table 6: One-way analysis of variance among the respondents' domicile concerning various dimensions of Secondary school students' LLL competencies.

S.NO	Source	Df	SS	MS	$\bar{\mathbf{x}}$	Statistical Inference
1.	Co-Curricular Activities				G1=14.2000	F=58.861
	Between Groups	2	393.468	196.734	G2=19.8333	p < 0.001
	Within Groups	79	264.044	3.342	G3=21.9444	Significant
2.	Performance Approach				G1=15.5000	F=50.242
	Between Groups	2	268.100	134.050	G2=19.8889	p < 0.001
	Within Groups	79	210.778	2.668	G3=21.9444	Significant
3.	Interest				G1=15.0000	F=34.743
	Between Groups	2	294.640	147.320	G2=19.9815	p < 0.001
	Within Groups	79	334.981	4.240	G3=21.6667	Significant
4.	Self-Efficacy				G1=15.3000	F=53.070
	Between Groups	2	370.629	185.314	G2=20.7037	p < 0.001
	Within Groups	79	275.859	3.492	G3=22.8333	Significant
5.	Surface-Level Strategies				G1=14.2000	F=48.013
	Between Groups	2	396.225	198.112	G2=19.7407	p < 0.001
	Within Groups	79	325.970	4.126	G3=22.0000	Significant
6.	Deep-Level Strategies				G1=15.0000	F=38.818
	Between Groups	2	383.413	191.706	G2=19.9074	p < 0.001
	Within Groups	79	390.148	4.939	G3=22.7222	Significant
7.	Achievement Level				G1=15.7000	F=46.724
	Between Groups	2	306.817	153.409	G2=20.6111	p < 0.001
	Within Groups	79	259.378	3.283	G3=22.5556	Significant
8.	Secondary School Students' LLL					
	Competencies				G1=114.30	F=45.719
	Between Groups	2	8977.471	4488.736	G2=140.31	p < 0.001
	Within Groups	79	7756.248	98.180	G3=151.50	Significant

G1= Urban; G2= Rural; G3= Semi-urban

Table 6: The respondents' domicile significantly varies in terms of the various LLL competencies for secondary school students, including co-curricular activities, interest, performance approach, surface-level tactics, self-efficacy, deep-level strategies, & achievement level, & overall LLL competencies.

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FINDINGS AND SUGGESTIONS

Results from the socio-demographic profile

- Almost half of the respondents, or 40.2%, were under the age of 14.
- ≥ 51.2 percent of the responders, or more than half, were female.
- The bulk of respondents, or 69.5 percent of them, attended private schools.
- > 75.6 percent, or more than three-fourths, of the respondents are members of nuclear families.
- The bulk of respondents, or 65.9% of them, resided in rural areas.

Results based on LLL competences of secondary school pupils

- The majority of respondents, or 61.0%, had a high level of interest in co-curricular activities.
- The majority of respondents, or 61.0 percent of them, gave the Performance method high marks.
- More than half of the respondents (53.7%) expressed a high degree of curiosity.
- ≥ 52.4 percent, or more than half, of the respondents attained a high level of self-efficacy.
- 58.5 percent of respondents, or more than half, had a high level of familiarity with surface-level tactics.
- The majority of respondents, or 61.0%, scored highly in relation to deep-level tactics.
- The majority of responders, or 64.6%, were highly successful in terms of achievement.
- The LLL competencies of secondary school students were at high levels for more than half (56.1%) of the respondents.

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Results supported by the research concept

- 1. A substantial relationship between respondents' ages and certain LLL competences of secondary school students.
- 2. A sizable inter-correlation matrix among the various LLL competences of secondary school pupils.
- 3. The gender of respondents and the various LLL competences of secondary school students varies significantly.
- 4. The type of school attended by respondents and the various LLL competences of secondary school students varies significantly.
- 5. There is a substantial correlation between respondents' family structure and several LLL competency measures among secondary school students.
- 6. There are considerable differences between respondents' domiciles in terms of the various LLL competences of secondary school pupils.

SUGGESTIONS

The following recommendations are made based on the current study on "secondary school students' LLL competencies"

- 1. Communication skill: Schools should offer classes to help kids develop their communication skills, which include listening, public speaking, and the ability to express themselves.
- 2. Leadership abilities: Schools can take steps to help students develop their leadership abilities, such as taking initiative and responsibility, persuading others to work

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- toward a noble cause, creating goals, inspiring others to strive toward those goals, and accepting accountability.
- 3. Creative thinking: The school must take the necessary steps to foster pupils' capacity for innovative problem-solving, visualisation, and generation of fresh ideas, among other skills.
- 4. Moral principles: Students must be taught in school how to uphold moral principles, decent moral values, etc. in public.
- 5. Social values: Schools need to instil in kids a respect for others' cultures and values as well as an understanding of individual variations.

Conclusion

The reason of the current learning is to observe the LLL competencies of secondary school students. With an 82-person sample size, the researcher used a descriptive research approach. This essay examined a number of LLL abilities among secondary school students, including co-curricular pursuits, interest, performance approach, surface-level strategies, self-efficacy, deep-level strategies, and achievement level.

Co-curricular activities promote the holistic development of people by fostering their physical, mental, emotional, spiritual, social, and moral growth. In order to accomplish the stated goals, LLL competency programmes for secondary school students are successfully implemented in educational institutions based on the aforementioned concepts. The development of the three Hs—Head, Hand, and Heart—leads to "all-roundness," which calls for the LLL competency activities of secondary school pupils.

Reference

- 1. European Commission (2001). *Making a European Area of Life-Long Learning a Reality*. Brussels: Commission of the European Communities.
- 2. Heckhausen, H., and Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivat.Emot.* 11, 101–120. doi:10.1007/BF00992338
- 3. Zimmerman, B.J. (2000). "Attaining self-regulation. A social cognitive perspective," in *Handbook of Self-Regulation*, eds M. Boekaerts, P.R. Pintrich, and M. Zeidner (London: Academic Press), 13–39.
- 4. Schmitz, B., and Wiese, B.S. (2006). New perspectives for the evaluation of training sessions in self-regulated learning: time-series analyses of diary data. *Contemp. Educ. Psychol.* 31, 64–96. doi:10.1016/j.cedpsych.2005.02.002
- 5. Vande Grift, W. (2007). Quality of teaching in four European countries: a review of the literature and application of an assessment instrument. *Educ. Res.* 49, 127–152. doi:10.1080/00131880701369651
- 6. Hudson JP. 2009. Pathways between Eastern and Western education. Charlotte, NC, USA. Information Age Publishing Inc.
- 7. Klein, PD. 2010. "Rethinking the multiplicity of cognitive resources and curricular representations: Alternatives to 'learning styles' and 'multiple intelligences." *Journal of Curriculum Studies*, 35(1). Pp 45–81.
- 8. Steinberg, L. 2011. "Cognitive and affective development in adolescence." *Trends in Cognitive Sciences*, 9(2). Pp 69–74.
- 9. Curriculum Development Council. 2007. *New senior secondary curriculum and assessment guide (secondary 4-6): Integrated Science*. Retrieved from http://334.edb.hkedcity.net/EN/curriculum.php.

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- 10. Rahul S. Pol, Amar B. Deshmukh, Makarand M. Jadhav, Kazi Kutubuddin Sayyad Liyakat, Altaf O. Mulani, "Ibutton Based Physical Access Authorization And Security System", Journal Of Algebraic Statistics Volume 13, No. 3, p. 3822 3829, 2022.
- 11. Kondekar, Renuka P., and A. O. Mulani. "Raspberry pi based voice operated robot." International Journal of Recent Engineering Research and Development 2.12 (2017): 69-76.
- 12. Kulkarni, Priyanka R., and Altaaf O. Mulani. "Robust invisible digital image watermarking using discrete wavelet transform." International Journal of Engineering Research and Technology (IJERT) (2015).
- 13. Kalyankar, Pratima Amol, et al. "Scalable face image retrieval using AESC technique." Journal Of Algebraic Statistics 13.3 (2022): 173-176.
- 14. Godse, A. P., and A. O. Mulani. Embedded systems. Technical Publications, 2009.
- 15. Mulani, Altaf O., and Pradeep B. Mane. "High-Speed Area-Efficient Implementation of AES Algorithm on Reconfigurable Platform." Computer and Network Security (2019): 119.
- 16. Mulani, Altaf O., and P. Mane. "Secure and area efficient implementation of digital image watermarking on reconfigurable platform." Int. J. Innov. Technol. Explor. Eng.(IJITEE) 8.2 (2018): 1.