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Research Paper

HiWEL Learning Stations and Confidence Levels of Underprivileged Children: Indian Context

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ABSTRACT

This is an exploratory study that aims to examine the relationship between Hole-in-the-Wall Learning Stations (HiWEL LS) and confidence levels of children. Children using HiWEL LS come from rural and semi-rural backgrounds with limited access to resources. Research on Hole-in-the-Wall (HiWEL) has conclusively indicated that groups of children pick up computer literacy on their own and are adept at performing basic functions such as cut, copy, paste, surf the internet to answer high-end questions. Research also indicates that children self-organize themselves to figure out things which they find difficult and thus learning is a continuous process for them. The studies have also indicated that HiWEL pedagogy is child-centric and children regulate their own learning as well as behaviour. Interestingly, so far, no study has been undertaken to determine whether children accessing Hole-in-the-Wall learning stations (HiWEL LSs) have improved their level of confidence. Thus, the intent of the present study is to examine how HiWEL LS impacts the confidence level among children. The findings are encouraging as it has been observed that this unique pedagogy has led to an increase in the confidence level of its users. The study has huge implications in the education space as complements the schooling system.

Keywords: *Self Confidence, HiWEL Learning Station, pedagogy, education, technology*

Although, Indian law guarantees free education to children aged 6-14 years, there still remains many barriers that prevent underprivileged children from accessing good quality education. Research has stated that as many as 32% of slum children drop out of school early or leave with low levels of literacy and numeracy (Asha India, 2022). The common reasons for dropping out are lack of interest in studies, cost of education and family pressures. It would thus be safe to state that learners with higher confidence are more willing to learn, challenge themselves, and have better resilience in the face of difficult transitions like changing schools or coming from challenging backgrounds. Out of 100 students, 29 per cent of girls and boys drop out of school before completing the full cycle of elementary education, and often they are the most marginalised children (Education, n.d.). Thus, confidence has been quoted as the number one predictor of academic achievement.

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Professor Sugata Mitra conducted an experiment in which a computer was placed inside a man-made hole in the wall. There was a camera installed to record activity near the computer. No instructions were given in any language. The findings of Dr Mitra's experiment prove that children learned basic computer skills on their own as well as curriculum content through games and other engaging activities (Mitra et.al 2003, 2003). Later, Prof Mitra designed a pedagogy named Self Organized Learning Environment (SOLE) labs which had the same underlying principle, the only difference being that the computers connected to internet were placed inside school classrooms. Prof Mitra's experiments demonstrated that groups of kids could learn to navigate computers and the Internet by themselves, and "research since then has continued to support his startling conclusion that groups of children, with access to the Internet, can learn almost anything by themselves. (Wikipedia contributors, 2023).

Teachers in both traditional and progressive environments have found ways to incorporate the SOLE approach in their work, whether for the span of a lesson or a semester. According to O'Malley (2017), "Consider it a tool for introducing and generating interest in a new topic, as well as broadening your students' understanding of a familiar topic."

The SOLE labs as well as Hole-in-the-Wall Learning stations continue to serve as a reminder that when it comes to technology integration in the classroom, children need to be given the opportunity to explore and learn through technology even if the adults in the room do not feel capable to handle or integrate technology. Many authors argue that self-confidence is a major contributing factor to academic excellence. In this study, we are attempting to examine the impact of HiWEL LS on the confidence levels. In other words, whether children using HiWEL LS will improve in confidence.

LITERATURE REVIEW

Many studies have discussed the quality of education in India and factors directly impacting it. A study conducted by Bajpai, Nirupam, Goyal, Sangeeta (2004) shows that even in educationally advanced states, an unacceptably low proportion of children who complete all grades of primary school have functional literacy. There is a lot of 'waste' in the school system as evidenced by the large percentage of children who drop-out before completing primary schooling. Such inefficiency is compounded by teacher apathy, teacher absenteeism, very high pupil-teacher ratios and inadequate teacher training. Benjamin, Annappaiah, Dinesha & Agrawal (2011), argue that maintaining experts and quality teaching in every rural school is very difficult; they proposed advanced technologies and tools which help in fixing the rural education problems. According to Dangwal, R. & Thounaojam, M. (2011), when children actively construct their own knowledge, they develop critical insights into how they think. These traits of self-regulation allow them to consciously reflect on what might be the most effective way to master the learning goal and choose an appropriate strategy to accomplish their goals.

Caruso, C (2011) stated that proper integration of platforms like online social learning spaces that enable peer-to-peer interaction encourage learners to participate at any level, and encourage them to contribute regardless of their proficiency, experiences, or skills. By doing so, these spaces ensure that learning is the ultimate focus. These spaces suggest new foundations for collaborative learning, where the tools are provided to self-organize, where peers are seen as resources, where learners freely disseminate information, and where there is recognition of the strength of collective intelligence.

Kumari, S. (2018), found a significant and positive correlation between self-confidence and occupational aspirations. Specifically, self-confidence had a significant impact on occupational aspirations among secondary school students. Ballane, G. (2019), reported that self-confidence had significant role in academic performance development, learning and success. Self-confidence was found as a predictor of academic performance. Better the self - confidence better the academic performance. However, both teachers as well as parents had a significant role in boosting self-esteem as well as self-confidence among students for improving academic performance as well as learning ability among students.

In their paper titled, "The influence of Self-Organized Learning Environments (SOLEs) on EFL students in a college in Oman", Zakwani and Walker-Gleaves (2019) argue that SOLEs help in creating autonomous learners. As per their findings, students demonstrated autonomy in many actions in the SOLE environment. They chose what website to surf, how to tackle each task, how to set goals, who to consult and many other autonomy-generated decisions. Such learners tend to take greater responsibility for their learning, which positively impacts the learning outcomes. Further, they argue that the approach of SOLEs motivates students to learn and work hard.

L N Zamnah and A M Ruswana (2019), through their research aimed to investigate and describe the improvement of self-regulated learning and self-confidence between two classes of students who implemented different learning model: one using self-directed learning and the other using conventional learning. The result showed that the learning method using self-directed learning affected the improvement self-regulated learning and self-confidence on students. Dolan et. al (2013), argue that SOLEs lead to an increase in student confidence as it is an "enquiry-based approach where greater student autonomy is anticipated". They argue that in SOLEs, learning is more "distributed and democratised rather than individualised". As a result of the democratized learning and increased agency, the students' confidence level increases. Abdullah Rahimi (2019), in his research, investigates and underlines the importance of positive reinforcement- encouragement and support received by the children, in increasing the confidence of children. According to him, positive reinforcement can improve children's self-concept, further improving their self-confidence. His findings are in line with Bitterlin (2011), who asserted that it is the support and encouragement that individuals receive from the people around them and helps shape their inner feelings about themselves.

Thus, the above literature review builds a case for us to study self confidence among HiWEL users.

Objective of the Study:

The objective of the study is to study the impact of HiWEL LS on the confidence levels of children using it. Above literature review clearly suggests that self-centric learning, self-regulated learning, positive reinforcement, peer learning etc, all lend themselves to increase in self-confidence among users. On the other hand, HiWEL pedagogy by virtue of its design lends itself to minimally invasive education wherein children operate in an unsupervised environment. This learning environment generates motivation, curiosity and is self-centric and collaborative. There is undisputed research that claims that children using HiWEL LS become digitally literate, improve academic performance, become self-regulatory learners, etc. However, no research study has yet been undertaken to study the impact of these learning stations on the confidence level of children.

Hypothesis: Children using HiWEL learning station with minimal intervention from adults/teachers will improve their confidence levels.

Research Design

Site Selection: A total of 23 sites were selected PAN India for the research study. The sites selected lie in Central (1 site), North (5 sites), South (5 sites), East (10 sites) and West (2 sites) zones of India.

Fig 1.0 that illustrates the states wherein the study was conducted along with number of sites selected per state.

Fig 1.0: States and Sites for Research

abbreviation	State(s)
PB	Punjab
DL	Delhi
RJ	Rajasthan
MP	Madhya Pradesh
UP	Uttar Pradesh
BH	Bihar
JH	Jharkhand
WB	West Bengal
OD	Odisha
AP	Andhra Pradesh
KN	Karnataka
TN	Tamil Nadu

Demographic: A total of 159 children were selected for the present study. These children belong to the age-group 12 to 14 years and come from underprivileged backgrounds with low-income households that are engaged in farm labour, construction works or daily-wage labour etc. Most of the parents have not completed their schooling and some are illiterate. Children go to government schools, and most schools do not offer access to computers.

METHODOLOGY

Using stratified sampling, a sample of 159 children was selected across all sites. The criterion for selecting these children was their proximity to the learning station and their availability throughout the research period. Pre-test was administered in the month of December 2022 and post-test was administered in the month of June 2023. This was done to examine if any change occurs in the confidence levels of children. As everything else remains constant in the lives of these children whether in school or at home, hence, any change in their levels of confidence can be attributed to the HiWEL Learning stations, which is the only intervention that they are being exposed to.

The gender breakup of the sample is as shown in the figure below.

Fig 2.0: Gender Breakup of the Sample

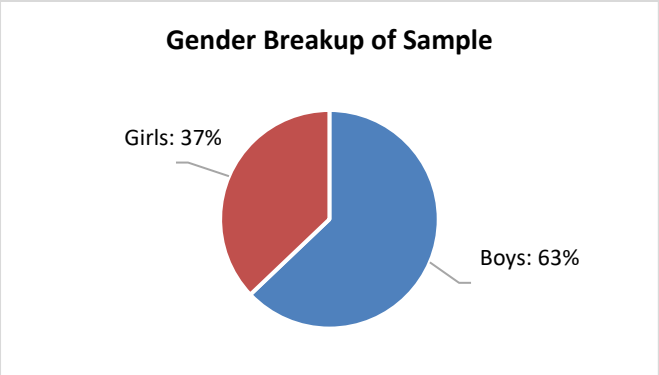

Figure 2.0 indicates that the sample has 63% boys and 37% girls.

Tool

Self Confidence Scale (SCS-GMLB model) developed by Prof. (Dr.) Madhu Gupta & Ms. Bindiya Lakhani) was administered in the present study. The questionnaire consists of 48 items based on five different dimensions of self-confidence, i.e., decisiveness, self-concept, self-control, inter-personal relations and parental support. The questionnaire was in Hindi and is a 5-point Likert scale – 'Always' 'Often', 'Sometimes', 'Rarely', 'Never'. For each statement the user has to tick mark one of the options applicable to him/her. Some items have reverse scoring.

Findings

Pre and Post test

Table 1.0: Pretest vs Post test – overall confidence

Group Statistics					
	Code	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Pre-Test vs. Post-test	0 (pretest)	159	3.16	.429	.034
	1 (post-test)	159	3.40	.503	.040

Independent Samples Test										
		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
									95% Confidence Interval of the Difference	
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**
Pre-test vs. Post-test	Equal variances assumed	48.537	.000	-4.557	316	.000	-.239	.052	-.342	-.136
	Equal variances not assumed			-4.557	308.235	.000	-.239	.052	-.342	-.136

Table 1.0 clearly indicates that there is a significant difference between pre and post-test at .000 level. Pre-test score is 3.16, whereas post-test score is 3.40. Thereby, indicating that children have scored significantly higher in post-test.

Gender Difference: Let us examine if there is any gender difference in the confidence level of the children.

Pre-Test Males VS Pre-Test Females

Table 2.0: Pretest males vs post-test females

Group Statistics					
	Code	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Pretest Males vs Pretest Females	0 (males)	100	3.16	.420	.042
	1 (females)	59	3.15	.448	.058

Independent Samples Test										
		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
									95% Confidence Interval of the Difference	
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**
Pretest Males vs Pretest Females	Equal variances assumed	.077	.782	.106	157	.916	.007	.071	-.132	.147
	Equal variances not assumed			.104	115.538	.917	.007	.072	-.135	.150

At the pre-test level, there is no significant difference between males and females. The mean score of males at pre-test level is 3.16 and for females it is 3.15. In other words, to begin with both males and females have similar levels of confidence.

Post-Test Males VS Post-Test Females

Table 3.0: Post-test males vs post-test females

Group Statistics

	Code	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Posttest Males vs Posttest Females	0 (males)	100	3.3500	.50000	.05000
	1 (females)	59	3.4746	.50364	.06557

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Post-test Males vs Post-test Females	Equal variances assumed	1.904	.170	-1.514	157	.132	-.12458	.08230	-.28714	.03799
	Equal variances not assumed			-1.511	121.080	.133	-.12458	.08246	-.28782	.03867

At the post-test level, there is no significant difference in the mean level of scores of males and females. Even though the mean score of females is marginally higher than the mean score of males. In other words, both males and females have similar levels of confidence.

Pre-Test Males VS Post-Test Males

Table 4.0: Pretest males vs Posttest males

Group Statistics

	Code	N	Mean	Std. Deviation	Std. Error Mean
Pretest Males vs Postest Males	0 (males pre-test)	100	3.1600	.41972	.04197
	1 (males post-test)	100	3.3500	.50000	.05000

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pretest Males vs post test Males	Equal variances assumed	24.364	.000	-2.910	198	.004	-.19000	.06528	-.31874	-.06126
	Equal variances not assumed			-2.910	192.229	.004	-.19000	.06528	-.31876	-.06124

The mean level of scores of males' pre-test is 3.16, and the mean level of scores for males' post-test is 3.35. This increase in the scores is highly significant at .01 level. In other words, the confidence level among male children has significantly increased.

Pre-Test Females VS Post-test Females

Table 5.0: Pretest females vs Posttest females

Group Statistics					
	Code	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Pretest Females vs Posttest Females	.00	59	3.1525	.44774	.05829
	1.00	59	3.4746	.50364	.06557

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pretest Females vs Post test Females	Equal variances assumed	19.785	.000	-3.671	116	.000	-.32203	.08773	-.49580	-.14827
	Equal variances not assumed			-3.671	114.430	.000	-.32203	.08773	-.49582	-.14824

- The scores of females' pre-test is 3.15, and the score of female post-test is 3.47. The difference is highly significant at .01 level. In other words, the confidence level among male children has significantly increased.
- The above findings clearly state that increase in confidence level among children is not gender dependent. In other words, both boys and girls have shown to increase in their confidence levels.
- It would be interesting to examine each of the 5 components that contribute to the overall self-confidence. The 5 components are: Decisiveness, Self-Concept, Self-Control, Interpersonal Relations and Parental Support.

Decisiveness

Table 6.0: Devisinvess: Pretest and Posttest

Group Statistics					
	Time	***N***	***Mean***	***Std. Deviation***	***Std. Error Mean***
Decisiveness	0	159	3.18	.594	.047
	1	159	3.35	.575	.046

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Decisiveness	Equal variances assumed	2.004	.158	-2.590	316	.010	-.170	.066	-.299	-.041
	Equal variances not assumed			-2.590	315.681	.010	-.170	.066	-.299	-.041

Table 6.0 indicates that the mean score for decisiveness pre-test is 3.18 and mean score for decisiveness post test is 3.35. Thus, there is significant difference at .01 level. In other words, decisiveness component is contributing significantly to the overall confidence levels.

Self-Concept

Table 7.0: Self-Concept: Pretest and Post-test

Group Statistics

	Time	N	Mean	Std. Deviation	Std. Error Mean
Self-Concept	0	159	3.09	.488	.039
	1	159	3.21	.517	.041

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Self-Concept	Equal variances assumed	23.393	.000	-4.242	316	.000	-.252	.059	-.368	-.135
	Equal variances not assumed			-4.242	312.857	.000	-.252	.059	-.368	-.135

Table 7.0 indicates that mean score of self-concept pre-test is 3.16, and the post-test level of score for self-concept is 3.42 which is significant at .01 level. In other words, self-concept is contributing significantly to the overall confidence levels.

Self-control

Table 8.0: Self-Control: Pretest and Post-test

Group Statistics

	Time	N	Mean	Std. Deviation	Std. Error Mean
Self-Control	0	159	3.09	.488	.039
	1	159	3.21	.517	.041

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Self-Control	Equal variances assumed	6.734	.010	-2.009	316	.045	-.113	.056	-.224	-.002
	Equal variances not assumed			-2.009	314.967	.045	-.113	.056	-.224	-.002

Table 8.0 indicates that mean score of self-control is 3.09 and the post-test mean score is 3.21 which is significant at .05 level. In other words, self-control is contributing significantly to the overall confidence levels.

Interpersonal Relation

Table 9.0: Interpersonal Relation: Pretest and Post-test

Group Statistics					
Interpersonal Relation	Time	N	Mean	Std. Deviation	Std. Error Mean
	0	159	3.09	.620	.049
	1	159	3.38	.735	.058

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Interpersonal Relation	Equal variances assumed	19.633	.000	-3.793	316	.000	-.289	.076	-.439	-.139
	Equal variances not assumed			-3.793	307.297	.000	-.289	.076	-.439	-.139

Table 9.0 indicates that mean score of Interpersonal Relation is 3.09, whereas the post-test level of score is 3.38. Thus, the difference in scores is significant at .01 level. In other words, interpersonal relation is contributing significantly to the overall confidence levels.

Parental Support

Table 10.0: Parental Support: Pretest and Post-test

Group Statistics					
	Time	N	Mean	Std. Deviation	Std. Error Mean
Parental Support	0	159	3.42	.766	.061
	1	159	3.75	.698	.055

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Parental Support	Equal variances assumed	4.616	.032	-4.058	316	.000	-.333	.082	-.495	-.172
	Equal variances not assumed			-4.058	313.310	.000	-.333	.082	-.495	-.172

Table 10.0 indicates that the mean score pretest of parental support is 3.42, whereas the post-test mean score is 3.75. Thus, the difference in scores is significant at .01 level. In other words, parental support is contributing significantly to the overall confidence levels.

Table 11.0: Overall components of Self Confidence and their significance

Components	Significant at .01/.05 level	Pretest score	Posttest Score
Decisiveness	.01 level	3.18	3.35
Self-Concept	.01 level	3.16	3.42
Self-Control	.05 level	3.09	3.21
Interpersonal Relation	.01 level	3.09	3.38
Parental Support	.01 level	3.42	3.75

Table 11.0 suggests that all the 5 components are contributing in the overall confidence level of the children.

Thus, the findings clearly indicate that HiWEL learning stations help in building confidence among its users as it nurtures and provides an environment of encouragement, motivation, ownership, academic improvement (to name a few).

Summary

As can be seen from the analyses that the intervention of HiWEL LS has significantly improved the overall confidence of its users. In the post-test, children's confidence has increased due to the exposure of these Learning Stations. Further, all the components of confidence have significantly contributed to increasing the overall confidence of the children. Moreover, the difference between the self-confidence scores of male and female children was not significant, indicating equal level of self-confidence among the children.

In conclusion, the hypothesis has been proven to be true. Groups of children using the HiWEL learning station with minimal intervention from adults/teachers improve their confidence levels.

REFERENCES

Annappaiah, Dinesha & Agrawal, Dr. (2011). Advanced Technologies and Tools for Indian Rural School Education System. International Journal of Computer Applications (0975 – 8887). 36. 54-60.

Bajpai, Nirupam; Goyal, Sangeeta (2004) Primary Education in India: Quality and Coverage Issues CGSD Working Paper No. 11 February 2004 (https://doi.org/10.7916/D8G1604S)

Ballane, G. (2019). Understanding of Self-Confidence in High School Students. Doctoral Dissertation. Walden University. Retrieved from https://scholarworks.waldenu.edu/ dissertations/6396 Bandura, A. (1986). Social foundations of thought and action. New Jersey: Prentice-Hall.

Benjamin Alcott, Manjistha Banerji, Suman Bhattacharjea, Mansi Nanda & Purnima Ramanujan (2020) One step forward, two steps back: transitions between home, pre-primary and primary education in rural India, Compare: A Journal of Comparative and International Education, 50:4, 482-499, DOI: 10.1080/03057925.2018.1527214

Caruso, C. (2011). The Tools of Engagement: Bridging Design Thinking and Social Media to Enhance and Support Collaborative Learning.

Dangwal, R. & Thounaojam, M. (2011). Self-regulatory behaviour and Minimally Invasive (MIE) Education: A Case study in the Indian context. International Journal of Education and Development using ICT, 7(1), Open Campus, The University of the West Indies, West Indies. Retrieved November 28, 2022, from https://www.learntechlib.org/p/188052/.

Dolan, Paul & Leat, David & Mazzoli Smith, Laura & Mitra, Sugata & Todd, Liz & Wall, Kate. (2013). Self-Organised Learning Environments (SOLEs) in an English School:

an example of transformative pedagogy?. The Online Educational Research Journal. Retrieved from: https://www.researchgate.net/publication/267448424_Self-Organised_Learning_Environments_SOLEs_in_an_English_School_an_example_of_transformative_pedagogy#:~:text=The%20SOLE%20concept%2C%20although%20flexible,matter%20prescribed%20by%20the%20teacher.

L N Zamnah and A M Ruswana 2019 J. Phys.: Conf. Ser. 1188 012081DOI 10.1088/1742-6596/1188/1/012081

Kleitman, Sabina & Moscrop, Tanya. (2010). Self-Confidence and Academic Achievements in Primary-School Children: Their Relationships and Links to Parental Bonds, Intelligence, Age, and Gender. DOI: 10.1007/978-1-4419-6546-2_14. Retrieved from: https://www.researchgate.net/publication/225877697_Self-Confidence_and_Academic_Achievements_in_Primary School_Children_Their_Relationships_and_Links_to_Parental_Bonds_Intelligence_Age_and_Gender

Kumari, Seema. (2018). Occupational Aspirations of Secondary School Students in relation to Self-confidence, Achievement www.ijcrt.org © 2021 IJCRT | Volume 9, Issue 5 May 2021 | ISSN: 2320-2882 IJCRT2105916 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org i565 Motivation and Parental Occupation. Ph.D. Thesis. Kurukshetra University, Kurukshetra. Retrieved from: http://hdl.handle.net/10603/250011

Mitra, S., J. Tooley, Inamdar, P., and Dixon, P. (2003), "Improving English pronunciation – an automated instructional approach", Information Technology and International Development, 1(1) pp. 741-83, MIT Press http://itidjournal.org/itid/article/viewFile/136/6

Mitra, Sugata, Ritu Dangwal, Shiffon Chatterjee, Swati Jha, Ravinder S. Bisht and Preeti Kapur (2005), Acquisition of Computer Literacy on Shared Public Computers: Children and the "Hole in the wall", Australasian Journal of Educational Technology, 21(3), 407- 426. https://ajet.org.au/index.php/AJET/article/v iew/1328.

Mohamud, Khadija. (2016). An Ethnographic Case Study research on students' perspectives of the Self-Organised Learning Environment (SOLE) and the Granny Cloud: A case of the School in the Cloud in West Bengal, India. 10.13140/RG.2.2.18198.57926.

O'Malley, J. (2017). Getting started with Self-Organized Learning Environments. Edutopia. https://www.edutopia.org/blog/getting-started-self-organized-learning-environments-jacquelyn-omalley

Ram, Mast et.al (2021). Analysis of Self Confidence Among Secondary School Students. Palarch's Journal of Archaeology Of Egypt/Egyptology 18(1), 5198-5205. ISSN 1567-214x. Retrieved from: https://archives.palarch.nl/index.php/jae/article/download/10292/9450/20219

Rahimi, Abdullah. (2019). Investigating the Contributing Factors Affecting High School Students' Self-confidence and the Solutions for Enhancement: A Case Study of Arabu Qala High School, Kandahar, Afghanistan. American International Journal of Social Science Research; Vol. 4, No. 1; 2019. Retrieved from: https://www.cribfb.com/journal/index.php/aijssr/article/view/316

Zakwani, Malik Al et. Al. (2019). The Influence of Self-Organized Learning Environments (SOLEs) on EFL students in a college in Oman. Journal of Information Technologies and Lifelong Learning (JITLL), Volume 2, Issue 2, December 2019. Retrieved from: https://infonomics-society.org/wp-content/uploads/The-Influence-of-Self-Organized-Learning-Environments-SOLEs.pdf

"About | School in the Cloud". *www.theschoolinthecloud.org*. Retrieved 2018-10-08. Educator Talk: Insights from a Veteran Educator: Untaught Technology Skills: The Hole in the Wall Experiment

Asha India. (2022, March 4). Education • Asha India. https://asha-india.org/how-we-help/education/

Education. (n.d.). UNICEF India. https://www.unicef.org/india/what-we-do/education

"Getting Started with Self-Organized Learning Environments | Edutopia". *Edutopia*. Retrieved 2018-10-09.

Wikipedia contributors. (2023). Self organised learning environment. Wikipedia. https://en.wikipedia.org/wiki/Self_Organised_Learning_Environment#cite_note-3

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Conflict of Interest

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