



# **Skill in Village Program Assessment Study** **for Deshpande Foundation**

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**ConveGenius™**  
INSIGHTS

**Learning Curve**

Life Skills Foundation



# TABLE OF CONTENTS

## Contents

<b>TABLE OF CONTENTS.....</b>	<b>2</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>CHAPTER 1: INTRODUCTION .....</b>	<b>6</b>
1.1 Skill in Village (SiV) Program Objectives	6
1.2 Purpose of the Report	6
1.3 Study Partners	6
<b>CHAPTER 2: REVIEW OF LITERATURE .....</b>	<b>9</b>
2.1 Multilingualism and English Language Education in India	9
2.2 Life Skills Education	11
2.3 English Language and Life Skills	14
2.4 Activity-Based Pedagogy	15
2.5 Decision Making and Activity-Based Pedagogy	16
2.6 Social Awareness, Interpersonal Relationships and Activity-Based Pedagogy	17
2.7 Self-Awareness, Language and Expression	18
2.8 Self-Management in Learning	19
2.9 Impact of Covid 19 on Life Skills of children	19
2.10 Conclusion	21
<b>CHAPTER 3: ASSESSMENT APPROACH AND METHODOLOGY .....</b>	<b>22</b>
3.1 Objectives of the Study	22
3.2 Research Design	22
3.3 Methods of Data Collection	23
3.4 Sampling Procedure	23
3.5 Frameworks: Tool Construction and Data Analysis	27
3.5.1 Cognitive Assessments Competency Framework .....	27
3.5.2 Life Skills Framework .....	29
3.6 Data Analysis	32
3.6.1 Cognitive Assessments: Rasch model .....	32
3.6.2 Data Analysis: Life Skills .....	34
3.7 Establishing Validity and Reliability	34
3.8 Risks and Limitations	35
<b>CHAPTER 4: PROJECT EXECUTION AND TEST ADMINISTRATION .....</b>	<b>37</b>
4.1 Project Execution	37
4.1.1 Project Management.....	37
4.2 The Project Team	38
4.3 Test administration Process	38
4.3.1 Training.....	38
4.3.2 Deployment .....	40
4.3.3 Data Integrity .....	40
4.4 Data Capture: Digitization of assessments	41
4.5 Logistics and Support	41

4.6 Timeline and Phases of Evaluation	41
<b>CHAPTER 5: DATA ANALYSIS AND FINDINGS.....</b>	<b>43</b>
5.1 Qualitative Data Analysis	43
5.2 Quantitative Analysis	46
English.....	48
State-Level performance in English.....	52
Cluster - wise performance of students in English .....	53
Question-level performance.....	53
Conclusion (English) .....	57
Life Skills Data Analysis: State Level Life Skills Data Analysis .....	58
5.3 Survey	92
Student responses in Karnataka .....	92
Parent Responses in Karnataka.....	92
Student survey responses in Telangana .....	94
Parent responses in Telangana .....	95
SiV trainers' responses .....	96
<b>CHAPTER 6: DISCUSSIONS AND CONCLUSION.....</b>	<b>97</b>
<b>CHAPTER 7: RECOMMENDATIONS .....</b>	<b>99</b>
<b>ANNEXURE.....</b>	<b>Error! Bookmark not defined.</b>
ANNEXURE 1 – Child Safeguarding and Protection Policy	<b>Error! Bookmark not defined.</b>
ANNEXURE 2 - Testimonials	<b>Error! Bookmark not defined.</b>
ANNEXURE 3 - Analytical and Critical Thinking	<b>Error! Bookmark not defined.</b>
ANNEXURE 4 - Life Skills Data Analysis: State Level Life Skills Data Analysis	<b>Error! Bookmark not defined.</b>
ANNEXURE 5 - Aligning Siv program with United Nations (UN) Sustainable Development goals	<b>Error! Bookmark not defined.</b>
ANNEXURE 5.1 .....	<b>Error! Bookmark not defined.</b>
<b>REFERENCES.....</b>	<b>101</b>

# Executive Summary

Skill in Village (SiV) is a skilling program conceptualised by Deshpande Foundation to support rural students in Karnataka and Telangana. The program focuses on using English language skill as a way to develop life skills with an aim to improve the employability by equipping the students with 21<sup>st</sup> century skills.

This report presents the findings from the impact study conducted by ConveGenius Insights and Learning Curves Foundation. It aims to evaluate learning outcomes in English language proficiency and Life Skills competencies of students of grade 7,8,9 and 10. The study was conducted through a mixed-method of qualitative and quantitative modes of data collection and analysis. The three main data collection methods used were – self-report tools for student assessments, survey and Focused group Discussion.

A two-level cluster sampling method was used in this evaluation study. First, clusters were sampled, and then, schools were further sampled using Probability proportional to size (PPS) within the sampled clusters.

The self-report tools used were customized tools developed to understand the learning levels of students. Three tools were used for testing students' learning levels. One testing the English language proficiency, the second testing Critical thinking, and the third testing life skill competencies. The self-report tools for students were self-marked on paper under enumeration. The same set of tools were used for both SiV and Non SiV students. The next set of tools administered were surveys developed separately for trainers, teachers, parents, school leaders and district officials only in the experimental group to understand their perspectives on the program. The surveys were administered through an online medium for teachers, trainers, school leaders and district officials while student and parent surveys were self-reported on paper. The next tool used were focus group discussions administered with students, trainers, parents and district officials only in the experimental group of the study.

The total number of students assessed stood at 2,046. The total number of SiV students assessed in English/Analytical and Critical thinking and Life Skills stood at 960 while a total of 1,086 Non-SiV students were assessed in English/Analytical and Critical Thinking and Life Skills.

The findings of the evaluation study were obtained from various analyses. For English proficiency levels, it was noted that the performance of SiV students in grade 7,9 and 10 was better than Non-SiV students. It was observed that to acquire grade level competencies, students of all grades require continuous remediation.

On analysing the life skill competency of the students, it was found that the program has significantly impacted grade 8, 9, 10 students' life skills than grade 7 students considering cluster level data analysis. Further, it was found that among middle school students (grade 7 & 8) there has been an improvement noticed in skills – self-management, social awareness, relationship skills and responsible decision making among students who attended the program for more than one year. In the case of high school students (grade 9 & 10) it was found there has been an improvement noticed in competencies – self-awareness and social awareness among students who attended the program for more than one year implying that the number of years of participation in the SiV program has a positive influence on developing life skills in students.

From the survey conducted with students and teachers, it was found that 30.3% students in Karnataka and 30.7% students in Telangana believe that post the program their English language skills have improved indicating that there is a connection between the ability to express in a language they consider important for pursuing higher education/better job opportunities and confidence levels. The findings from Focused Group Discussions show that students in the focus have been able to build a relationship of trust with their peers and with the trainer. Further they reported that the activity-based pedagogy being used makes learning joyful, engaging and gives opportunities to them to participate, express and discuss their ideas.

The study further discusses about aspects which have contributed to the effectiveness to the program. It was found that the program has been successful in terms of equipping children with life skills. The program has received positive response in receiving community support to trainers. The trainers have efficiently addressed challenges and have supported the students. Regular follow-up and inputs were taken from the parents and cordial relations were maintained with cluster heads. Trainers are self-motivated and have come up with creative ideas in implementing, resulting in interesting classes for students. Teachers customize the content based on the contextual learning experiences with which students make learning more effective as well as to cater to the students' learning levels.

Some improvement areas were addressed in this report. It was recommended that the program be structured to engage students in development of life skills. This can be done through age appropriate curriculum development which has inputs on life skills. The objectives of life modules need to be identified. Since the program has integrated English language with life skills, the life skills component needs to be given regular practice. A structured evaluation framework to assess life skills of students will be helpful to track changes in abilities and life skills of students continuously. A need to develop structured modules equipping teachers in delivering content on skill specific content to students will be helpful. Teacher workshops focusing exclusively dealing with strategies teachers can engage children in life skill development can also be administered. Along with it, practices on integrating English language content with life skills will help teachers to engage students in life skills development more regularly and efficiently.

This report also constitutes an analysis of SiV program objectives aligned with the United Nations Sustainable Developmental Goals (UNSDG) based on the overall program intervention, curriculum design and pedagogy. The detailed analysis can be found in [Annexure 5](#). It is an attempt to reflect the progress on SDGs using SiV impact indicators based on student learning outcomes in English language proficiency and life skills. It was found that the SiV goals are strongly aligned with UNSDG 4 - ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all as the program is centered on skill-based learning and literacy. The program's alignment particularly lies at the intersection of SDG 4.1 focused on universal access to primary and secondary education and SDG 4.4 focused on relevant skills for decent work. Overall, the program goals are aligned with SDGs that focus on upward social and economic mobility as outlined in the analysis above and presented in the economic and social dimensions. To explore further ways of alignment with UNSDGs, there is a need to explicitly identify access and quality for learning for disadvantaged gender groups such as girl students. It is recommended that a monitoring framework be developed along with project's theory of change and SDG indicators along each program and output.



1

## CHAPTER 1: INTRODUCTION

Skill in Village (SiV) Program was initiated in 2017 by Deshpande Foundation's skill development training center in Dharwad district, Karnataka. While managing its skilling program for graduate students, Deshpande Foundation (DF) realized a better social impact could be achieved by refining the pedagogical practices early in childhood education. The mission of the program is to improve skilling and employability by equipping rural students with 21<sup>st</sup> century skills to navigate their chosen career path. The SiV program was conceptualized to use English language intervention as a tool to develop life skills among first generation learners in rural areas of Karnataka and Telangana. It aims to strengthen English language skills and life skills to build a strong foundation in their formative years.

The program intends to minimize the urban-rural divide in terms of quality of education. It is asserted that the English language has become a prerequisite for higher education and for employability. It is a medium through which one's horizon gets expanded in acquiring knowledge.

### 1.1 Skill in Village (SiV) Program Objectives

- To ensure that the students belonging to the bottom of the pyramid (especially rural and semi-urban areas) are ready for this century.
- To inculcate 21st-century skills like creativity, collaboration, critical thinking and culture over a period of time as the program matures.
- To build English communication skills among the children by covering the core essentiality of the 4Cs – Critical thinking, Communication, Culture, and Creativity.
- To bring the children into the mainstream of the 21st century by improving their personality and confidence to clinch better opportunities to stand as efficient.
- To improve communicative competence, the ability to access digital literacy and usage technologies towards better career opportunities.

### 1.2 Purpose of the Report

The report aims to discuss the findings drawn from the evaluation study. The report describes the plan of the study, methodology, details on assessment plan, study administration, analysis, discussion on findings followed by recommendations.

### 1.3 Study Partners

Skill in Village Program (SiV) has partnered with ConveGenius Insights (formerly known as Gray Matters India) to conduct impact assessments. ConveGenius Insights (CGI), in collaboration with

Learning Curve Foundation (LCF), conducted the assessments in two locations: Hubli Sandbox in Karnataka and Kakatiya Sandbox in Telangana.

### ConveGenius Insights

ConveGenius Insights (CGI) is a top educational and impact assessment organization in India and has assessed 1,000,000+ students from 15 states, spanning diverse backgrounds. CGI believes in the power of data and assessments to unlock the potential of millions of children and make them future-ready.

Over the last decade, CGI has adopted a highly nimble approach to understanding the education sector and developing contextualized, customized solutions that bridge the gaps in the Indian education space. CGI has pioneered models to develop modern measurement techniques in education that are actionable on the ground and contextualized to the diversity of India. From conducting parent surveys to organizing teacher focus groups and collecting data in large scale assessment, we are committed to the improvement of education using data. A sample of CGI's works is listed in the table below.

**Figure 1. Sample of CGI's work**

Project Name	Scale	Year
Impact evaluation for QEI- development impact bonds	2,00,000+ students	2018-22
Saksham Haryana	4,00,000+ students	2017-19
Longitudinal impact of STIR education	6,000+ students + 300+ teachers + 200+ school leaders	2015-17
Assessment of Government Partnership Schools (PPP Schools)	5,000+ students + 300+ teachers + 60 School leaders + 3000 parents	2018-19
School transformation Program in Affordable Private Schools (APS Schools)	40,000+ students	2016-19
Assessment for evaluating impact of tablet based content	2,000+ students	2017-19

### Learning Curve Foundation

Learning Curve Life Skills Foundation is a not for profit organization based in Hyderabad, India, which is rooted in the belief that social-emotional learning is a core component of a child's growth, and particularly in under-resourced environments this can greatly enable equitable adulthood and eventually life outcomes.

We do this through a whole school approach, and our program provides structured support and inputs in the following ways:

- Enabling **teacher social-emotional competence** through development and mentoring
- Enabling teachers to translate this in the classroom through structured and age-specific **social-emotional curriculum** for students (6-15 years)
- Capacity building of **school administrators** to create conducive learning environments through SEL practices
- Engaging **parents** to nurture and bring positive home environments through SEL

Progress of both teachers and children is carefully documented and evaluated using a set of established tools and frameworks. Since 2016, the program has been implemented in 437 unaided



and Government schools, directly impacting 2983 teachers and 78,000 children.

**Figure 2. Sample of LCF's work**

Project Name	Scale	Year
Ready for the World - integrating life skills into mainstream education	4,500+ students + 170 teachers	2017-18
Ready for the World - integrating life skills into mainstream education	8,900+ students + 360 teachers	2018-19
Ready for the World - integrating life skills into mainstream education	24,000+ students +750 teachers	2019-20
Ananda Vedika (AP SCERT) - curriculum design and capacity building for life skills	2,00,000+ students	2018-19
State of SEL in SQEP schools - diagnostic framework and assessment of state of life skills	5,000+ students	2019-20
Design of life skills content through storytelling - GCERT	30,000+ students	2020-21



## CHAPTER 2: REVIEW OF LITERATURE

The review of literature chapter attempts to understand the Skill in Village program introduced by Deshpande Foundation in the backdrop of available literature. Relevant literature to understand aspects of English language education, life skills education and activity-based pedagogy are reviewed. The literature is collected from varied sources and analyzed to attain a holistic picture.

### 2.1 Multilingualism and English Language Education in India

India is a multilingual nation. There are 22 scheduled languages and 99 non-scheduled languages included in the eighth schedule of the Constitution of India. . There are 270 identifiable mother tongues in the country (Census of India, 2011). The expanse of multilingualism has made scholars wonder how communication happens in India (Saraf, 2014). At the time of independence illiteracy was one of the major issues. To eradicate illiteracy, education in the regional medium was suggested. However the case of education is much more complicated. Education needs to establish connections with international stakeholders too (Pattanayak, 1981). Hence limiting oneself to regional language can act as a deterrent to access knowledge systems of the world. Due to the colonial presence in India, the influence of the English language was unavoidable. It gradually developed into the language of academicians and intellectuals. This posed a challenge to the masses. As they were isolated from the academic work being created due to their inaccessibility to the English language. Under these circumstances in the 1960's 'Three Language Policy' was developed. This policy suggested for introducing 3 languages in the education system:

1. Regional language or mother tongue
2. Hindi
3. English (Meganathan, 2011)

One of the major challenges was to decide which language to use as a medium of instruction in schools.

NCF 2005 suggests mother tongue or the local language contextualized to a child's setting to be used as a medium of instruction. This brings in the instrumentality versus identity debate in the language discourse (Sharma, 2020). The identity debate argues that education in foreign language leads to alienation of the child in their own context. Hence it suggests a mother tongue based multilingual system of education. On the other hand the instrumentality approach argues that English acts as a force for upward mobility for the disadvantaged groups (Sharma, 2020). The rising demand for the English language gradually replaced and became the medium of instruction in schools.

The New Economic Reforms of 1991 led to ever-growing demand for the English language. Opening of the market to international players created more job opportunities. Along with its proficiency in English language became a factor influencing employability. This led to growth in the demand for English medium schools. Establishing English medium schools often becomes a political concern as the issue is closer to people's aspiration and acts as a force of mobilization. This gets established with states introducing English language as early as in class I (Agnihotri, 2010). Parents often equate quality education with the English medium of instruction. They believe by gaining education in English one can secure employability in future.

The English language is not only understood as a gateway to economic success but a ladder for social mobility too (Mehrotra & Panchamukhi, 2007). It is observed that parents prefer low-cost private schools to government schools. The low-cost private schools pull admissions by advertising English medium curriculums. However, the facilities in low cost private schools are much poorer compared to a government school (Mehrotra & Panchamukhi, 2007). These schools are established informally without government recognition (Gibb, 2012). This establishes that parents from underprivileged backgrounds associate quality of education with English medium of instruction. However, the difference in quality of English language education provided in elite schools and low cost private schools further intensifies the rich-poor divide. Not only the rich poor divide but also rural urban divide in terms of quality of English language education is entrenched in India.

To bridge the rural urban and rich poor divide in the field, along with the government three major players have taken initiatives.

1. **International agencies:** World health organizations in collaboration with private and non-government organizations try to reach rural and underprivileged areas to implement English language programs.
2. **Private organizations:** Private organizations with help of their corporate social responsibility fund invest in reaching rural and underprivileged areas to implement English language programs.
3. **Non-government organizations** (Rajasekaran & Anburaj, 2015)

In the following paragraphs three English language programs introduced by NGOs are analyzed.

1. Rising Star Outreach Program
2. IGNIS careers
3. English- Speak Out program

'Rising Star Outreach', a US based non-governmental charitable trust established a residential school in Chennai in the year 2008 to provide English medium schooling. The outreach program tried to build a network with family and community for program implementation. Few findings of this study are discussed. The study revealed that a participatory approach of teaching was adopted. The attempt was to build interaction among students to improve their speaking skills. Initially the program succeeded in encouraging students to participate. Later the school applied for matriculation recognition and the system lapsed to the traditional mode of teaching learning. Even after in-service teacher training in activity-based approach, teachers could not implement activity-based pedagogy due to the challenge of syllabus completion. The study revealed the students in their immediate surroundings did not require speaking English. Hence platforms were to be created for them to utilize their skills. This led the school to organize an English-speaking summer volunteer program. Similar aims guided Bhumi NGO to introduce English language programs in Chennai and Bengaluru.

Ignis Careers is a social enterprise. It develops English language and life skill capacities among children and teachers. They work with first generation learners in low-income communities. Since 2014 IGNIS has implemented programs in Telangana, Andhra Pradesh, Orissa, and New Delhi. The program customizes their learning material based on the context of children. English and Life Skills Labs (ELSL) program is a capacity building program for teachers and students. The program helps schools to use their resources effectively. The program trained 50,000 students and 3000 teachers in 200 schools

across districts of Telangana. The program tries to incorporate English language skills with life skills (IGNIS-Inspired Learning, Nd).

The English - Speak Out program took shape in 2008 with the objective to equip children from underprivileged backgrounds with the English language. They attempted to make the transition from the vernacular medium of instruction in schools to the English medium of instruction in higher education institutes smooth for the students. The intervention is given to children from classes 3<sup>rd</sup> – 9<sup>th</sup>. The teaching pedagogy and curriculum was adopted from organizations like AID India, Make a Difference and Vidyarambam. The Organization claims over 400 students benefited from English speak out intervention programs (Bhumi- Speak Out, 2014).

This section of literature covered arguments surrounding multilingualism and English language education in India. The arguments of instrumentality versus identity approach were analyzed. The reasons for growing demand of English medium instruction and its leading to budding of low cost private schools were understood. Further the purpose of this literature is to determine the link between English language programs and life skills. The attempt is also to understand if child centered pedagogies like activity-based learning influences life skills among children.

## 2.2 Life Skills Education

UNICEF defines life skills in terms of “abilities, attitudes and social emotional competencies” that an individual needs to develop to lead a healthy and productive life (UNICEF, 2019). It empowers the individual to make informed decisions and exercise their rights in the community. It is claimed that life skills enhance the learning ability in the sphere of literacy and numeracy among children. UNICEF identifies four major dimensions of life skills.

They are:

1. **Empowerment:** Self-Awareness, Communication, Resilience
2. **Citizenship:** Empathy, Participation
3. **Learning:** Critical thinking, Creativity, Problem Solving
4. **Employability:** Negotiation, Decision-making (UNICEF, 2019)

UNICEF identified three core issues in India that require immediate attention “inequity, fragile knowledge society, depleting human capital” (UNICEF, 2019). It is revealed in the literature that in India underdevelopment is geographically concentrated. Young people lack necessary skills and competencies to attain employment and this has resulted in lack of workspace readiness. The “psychological competencies and interpersonal skills” like making responsible decisions, creativity, critical thinking, establishing healthy relationship skills etc. are to be developed and children need to be given opportunities to practice them. It is pointed out that a sound life skill intervention program can address all these problems.

The World Health Organization (Henceforth, WHO) conceptualizes life skills in the context of health and psychological competence. It specifies life skills are “abilities that support the adaptive and positive behavior” of individuals in challenging situations (World Health Organisation, 1997). It is observed that life skills can vary according to cultural settings. However, WHO identifies core life skills that are common to all setting:

- Decision making
- Problem solving
- Creative thinking
- Critical thinking
- Effective communication
- Interpersonal relationship skills
- Self-awareness
- Empathy
- Coping with emotions
- Coping with stress (World Health Organisation, 1997)

The World Bank conceptualizes life skills in terms of “non-cognitive social emotional skills” (UNICEF, 2019). It stresses on the ability of an individual to “navigate in interpersonal and social situations” (World Bank, 2017). Along with these skills the World Bank emphasizes “cognitive and technical skills” for leading a productive life (World Bank, 2017). It asserts in developing countries like India life skill education can empower people and provide them skills to actively participate in community development. It can help to break the cycle of poverty and also give abilities to navigate oneself in vulnerable social environments. Further it is pointed out by the World Bank that school is an appropriate social institution to introduce children with life skills. Schools are one of the prime-socializing agencies for a child. It has the capacity to provide varied social experiences in the formative years. It has potential to create a network between parents, community and children to create a conducive environment to deliver life skills programs (Dinesh & Belinda, 2014).

In India initiatives were taken through national curriculum documents to introduce life skills education in schools. One of the earliest mentions was observed in National Curriculum Framework 2000. It focused on preparing children to be able to deal with challenges and social vulnerabilities like drug abuse, violence, child abuse that one might come across (NCF, 2000). National curriculum 2005 expanded the understanding of life skills to “critical thinking, decision-making, problem solving and interpersonal communication skills” (NCF, 2005). Along with it the framework suggested replacing traditional teaching methods with child centric constructivist pedagogies. It was stressed that skills like critical thinking and problem solving can be realized only when the child is given space and freedom to exercise one’s thoughts in the classroom (NCF, 2005). Further, NCF 2005 became a guiding document for the Adolescence Education Program 2005. It was introduced by MHRD. Its main objective was to prepare children to face socially risky situations (Grover, 2018). One of the most recent additions to the life skills policy in the schooling system is discussed in National Education Policy 2020.

National Education Policy 2020 considers life skills as 21<sup>st</sup> century skills. The document stresses along with cognitive skills “building character, creating holistic and well-rounded individuals” needs to be the aim of the schooling system (NEP, 2020). The policy document suggests integrating the 21<sup>st</sup> century skills in the regular curriculum. The responsibility of identifying these skills and incorporating them in the national curriculum framework is given to NCERT. NCERT based on NEP 2020 guidelines designs curriculum and teaching learning materials for directly implementing the curriculum in the classroom. NEP identified few skills:

- Ethical Values
- Constitutional Values
- Intellectual Curiosity
- Scientific Temper
- Creativity
- Innovation
- Critical Thinking
- Spirit of Service
- Higher-Order Thinking Capacities
- Problem-Solving Abilities
- Teamwork
- Communication Skills (NEP, 2020)

Subhita GV in her article mentions life skill education is often confused with vocational education (Dinesh & Belinda, 2014). In that scenario the exclusive focus would be on developing technical skills that equip the child for future employability, but social and emotional development gets ignored. On a similar count to understand the challenges faced by schools to implement life skills programs, Priyanka Behrani conducted a detailed case study in seven CBSE schools of Gujarat. Her study revealed students in CBSE schools have an immense academic burden. Since the life skills course was not graded, they did not consider the activities as important. Their participation and interest in the program were limited. Teachers found it difficult to involve students in meaningful activities within one session per week schedule. Parents on the other hand did not realize their children were part of the program. They gave more importance to a child's academic achievements over life skill

development (Behrani, 2016). These life skills programs are concentrated in privileged schools. Non-profit organizations have taken initiatives to introduce life skills for underprivileged children. However, it is a recent phenomenon. Life skills programs introduced by various organizations are reviewed and collated in the following table.

**Table 1. Life Skill programs in India**

Program	Areas	Description	Outcomes of the program
Mentor Together	Pune, Mumbai, Bangalore, Chennai, Delhi	Mentor Together provides life skills mentoring to children facing high-risk conditions. It is a 3-year intervention for class 8th - 10th students. The mentors worked on 18 different life skills and work skills with children.	<ul style="list-style-type: none"> <li>95% of mentees say they have learnt a lot from their mentors.</li> <li>80% of mentees say they are doing better in school due to their mentors.</li> <li>79% mentees say their mentors have helped them in their life.</li> </ul>
Apni Shala – Social Emotional Learning Shala	30 in schools Mumbai	The program tries to build social emotional learning competencies among class 4th-9th children. They used play-based and experiential learning methods. We use a strength-based approach while engaging children.	<ul style="list-style-type: none"> <li>84% of children show an increase in at least one skill.</li> <li>19% of children show an increase in all five skills assessed.</li> </ul>
Magic bus: youth-centered Livelihoods Program	930 schools across India. 31 schools across Nepal, Bangladesh and Myanmar	Magic Bus works with children between 12-18 years from underprivileged backgrounds. The program is employability centric. Skills like teamwork, problem solving, managing self, learning to learn and communications, self-efficacy are major focus.	<ul style="list-style-type: none"> <li>37% increase in attendance.</li> <li>70% of young people trained in livelihood programs successfully placed in jobs with average income of Rs.10, 287.</li> <li>95% of girls did not get married before 18 years.</li> <li>Less than 5% of girls dropped out of school before 8.</li> </ul>
Dream a Dream	State government schools in Delhi and Jharkhand	Dream a Dream introduced a life skills program to nurture empathy, expand creativity, develop listening and validation skills and build facilitation skills for teachers. The organization works with volunteers and local charity groups.	<ul style="list-style-type: none"> <li>90% of teachers trained will introduce experiential learning in class</li> <li>6 out of 10 participants responded the Life Skills workshop as excellent</li> <li>5,000 pro-bono hours contributed by over 3000 volunteers</li> </ul>

Youth focused Life Skills Education and Counseling Services (YLSECS) program	Karnataka	Youth focused Life Skills Education and Counseling Services (YLSECS) program, trained teachers/ National Service Scheme (NSS) officers to deliver Life Skills Education (LSE) and counseling services to college going youth in the state of Karnataka.	<ul style="list-style-type: none"> <li>• 792 participants rated the quality of training as either “good” or “excellent”.</li> <li>• Post-training, a significant proportion of the participants reported improved awareness about life-skills.</li> </ul>
Learning Curve - Life Skills Foundation	Hyderabad and Chennai	Learning Curve’ social emotional learning program to empower children from underserved environments to have access to equitable adulthood outcomes. They cover a 7 year SEL curriculum from Grade 3 - 9, structured teacher development support to deploy the curriculum, along with tools and systems for classrooms, schools and parent communities.	<p>2019-2020 report claims: Impact of the program on <b>KGBV schools</b></p> <ul style="list-style-type: none"> <li>• 53% of the students have shown 1 level ↑ on SEL</li> <li>• 56% of the teachers have shown 1 level ↑ on SEL</li> <li>• Delivery effectiveness increased by 46.15%</li> <li>• Classroom engagement increased by 33.33%</li> <li>• School SEL environment 14.89%</li> </ul> <p>Impact of the program on <b>APS schools</b></p> <ul style="list-style-type: none"> <li>• 69% of the students have shown 1 level ↑ on SEL</li> <li>• 42% of the teachers have shown 1 level increase on SEL</li> <li>• Delivery effectiveness increased by 15.53%</li> <li>• Classroom engagement increased by 38.89 %</li> <li>• School SEL environment 42.11%</li> </ul>

This section of literature covered meaning and dimensionality of life skills, arguments about schools being prime institutions to impart life skills, discourse of life skills in the Indian education system followed by nonprofit organizations involvement in the field of life skills education programs in underprivileged areas. In the following section, the growing importance of the English language in a multilingual country like India is analyzed. The arguments surrounding English language initiatives in rural and underprivileged areas are discussed.

### 2.3 English Language and Life Skills

There is no literature that establishes direct or inherent relation between language education and life skills. However it is observed by scholars that there is a direct correlation between language proficiency and self-esteem.

Rosenberg. M (1965) understood self-esteem as evaluation of oneself. According to him, high self-esteem in an individual corresponds to high levels of self-worth perceived by oneself. Rosenberg’s study involved adolescents of 15-18 years of age. He mentions it is an age group that is extremely concerned with self-image. It was found that an individual's perception of self is based on what others think of them. In the age group selected for the study, peers' perception was a major factor that affected one’s self esteem. The study revealed that lower self-esteem, limited is the individual’s participation in-group settings. It was pointed out that people with low self-esteem have feelings of inferiority, worthlessness, emotional instability, dissatisfaction etc. Low self-esteem has a positive correlation with behavioral issues in children. High self-esteem corresponds to positive mental health and overall happiness (Rosenberg, 1965).

Branden (1969) perceived self-esteem in two ways:

1. **Self-efficacy:** An individual's perceptions on one's ability to learn, think, choose or make decisions effectively.
2. **Self-respect:** An individual's perception of respect one deserves. It is the feeling of self-satisfaction one feels with oneself (Abdel-Khalek, 2016).

With this understanding about self-esteem, a link between English language competency and self-esteem is explored. Wenni Wulandari Gustaman (2015) conducted a study in senior high school of Cimahi, Indonesia. Eleventh grade children were involved in the study. A self-report tool followed by a speaking exercise was assigned to students to understand the link between self-esteem and English language competencies. The data revealed that there is significant positive correlation between self-esteem and English language speaking competency (Gustaman, 2015). Navita (2016) conducted a similar study in Jind and Rohtak districts of Haryana. The data revealed that there is significant and positive correlation between English language competencies and self-esteem (Navita, 2016). Hence it can be derived that improvement in English speaking skills can enhance one's perception of self.

In this section of literature connection between language proficiency and self-esteem as a core life skill was explored. In the following sections an attempt is made to understand if child centric pedagogies influence development of life skills among children. For this purpose, aspects of activity-based pedagogy are analyzed and its connection with core life skills like decision-making and interpersonal relationships is explored.

#### **2.4 Activity-Based Pedagogy**

In India Gandhi and Aurobindo are pioneer contributors to child centered pedagogies. In Nai Talim Gandhi advocated for developing an authentic teaching learning practice by teachers based on the context of children. For this purpose he argued for teacher autonomy to decide on content, pedagogy and evaluation system (Smail, 2013). On the other hand, Aurobindo stressed on a child's autonomy. He argued the child needs to be able to self-reflect and self-evaluate the knowledge he/she constructs (Smail, 2013). Hence from these arguments it can be deduced that both Gandhi and Aurobindo advocate for creating an active learning environment for children. These ideas were conceptualized in the National Curriculum Framework 2005. The document argues for a contextualized setting, where the knowledge system is familiar and not alien to the child (NCF, 2005).

Further to understand the child centric methods of learning, a study on activity-based pedagogy is selected. Arathi Sriprakash (2009) studied the 'Nali Kali - joyful learning program' introduced in primary schools of Karnataka. The study focuses on aspects and challenges in implementing activity-based methods of learning in rural low-income level schools. The Nali Kali program aimed to make learning interesting and burden free for children. The focus of learning was moved away from textbook centric approach to hands-on activities. The study revealed teachers are used to the traditional method of transmitting knowledge. They believed their role was to pass information in the classroom. They found it challenging to shift to a completely new system of teaching where their role was of a facilitator. The study found teachers were reluctant to adapt to a new pedagogy as they felt their dominant role was being diluted. They often relapsed to the traditional lecture mode of teaching. The reason behind the relapse was the vast syllabus to be covered in a limited time period. Also, they felt activity based pedagogy was time consuming and they were unsure what children were learning. Hence teachers preferred the lecture method to the activity method (Sriprakash, 2009). It is fair to deduce from the above arguments that mere replacement of traditional methods with a child centric approach does not serve the purpose. To make learning child centric, suitable contexts in terms of availability of time, resources, and reduced syllabus needs to be considered too.

The study undertaken by Arathi Sriprakash focused on teacher's perception on activity-based pedagogy. To understand the impact of activity-based pedagogy on students, a report submitted by Ei – Educational Initiatives organization to UNICEF is referred to. The study was carried out to evaluate activity-based pedagogy in 7 states (Rajasthan, Madhya Pradesh, Jharkhand, Gujarat, Andhra Pradesh, Karnataka and Tamil Nadu) in 2013 (Educational Initiatives Organization, 2013). The objective of the study was to compare cognitive and non-cognitive outcomes generated.

The study revealed among 110 classrooms studied:



- 75% of classrooms had a fear free environment, which means no kind of punishments were seen.
- 27% of classrooms provided fear free environments followed by children's active participation in activities.
- 13% of classrooms were successful in creating a fear free environment, active participation from children and children accepted their responsibility to learn and involved in activities voluntarily (Educational Initiatives Organization, 2013).

The study revealed that teachers had limited understanding of pedagogy. Only 22 out of 110 teachers articulated and were successful in carrying out activities in the classroom. The teachers have pointed out that children's participation in the classroom was limited and they did not take learning seriously due absence of a traditional examination system. The study pointed out teachers felt burdened with work like: record keeping, tracking progress of children, maintaining a diary, making lesson plans etc. Teachers stressed that the activity-based pedagogy led to chaos in the classroom, stalling learning. They expressed concerns about losing authority in the classroom. However, the study revealed that there was considerable difference in learning outcomes in activity-based classrooms compared to traditional classrooms in Gujarat. In other states the learning had lapsed to traditional lecture methods. The study revealed that absence of suitable conditions to implement activity-based learning caused poor functioning of the method. Stronger teacher training that focused on underlying principles of the pedagogy rather than the procedural aspects was suggested by the study.

Through this section of literature aspects of activity-based pedagogy and its effects on learning outcome were explored. The challenges associated with the method and teacher's perception were delved. The following section explores how activity based pedagogy impacts development of core life skills like decision-making, social awareness and interpersonal relationships.

## 2.5 Decision Making and Activity-Based Pedagogy

Decision-making is an iterative process one involves in order to reach an action corresponding to a problem/situation. Russo (2014) identifies four steps of decision-making:

1. **Issue Framing-** In this step the issue at hand is identified and understood.
2. **Intelligence Gathering-** Information is collected or alternatives are explored in this step.
3. **Forming conclusions-** Choice is made based on the information/alternatives available.
4. **Learning from experience-** In the decision-making process experience is captured and reflected upon to effectively deal with a similar situation if it occurs at a later stage.

The literature captures few aspects involved in the process of decision-making. One can make a decision or solve a problem using critical thinking or creative thinking. Mertes (1991) and Ennis (1992) consider critical decision making as a conscious process that involves evaluation of information and reflection on experiences to perform a thoughtful action (Mertes, 1991) (Ennis, 1992). Fischer (2006) expresses the meaning of critical decision making in the form of questions one needs to address to make a decision or solve a problem.

Barrow and Woods (2006) define the meaning of creativity and establish conditions to identify creative produce. The first condition is – anything that is creative needs to be original. This means it should be an outcome of one's original thoughts and plan. An imitation or a copy of someone else's work cannot be termed as creative. Anything that is artistically pleasing, or an outcome of skilled craftsmanship cannot be considered as creative, it's considered as reproduction of previous works. A creative piece needs to be atypical, original and needs to break new ground or give new dimension to address a problem (Barrow & Woods, 2006). There are many intangible aspects associated with creativity. However, it is widely expressed that creativity is an outcome of lateral thinking (Bono, 1970). Lateral thinking is a process in which one attempts to view a situation in alternative dimensions that fall beyond regular and typical ideas. Lateral thinking is often associated with inventions, but it is just an aspect of it. Lateral thinking is an atypical approach to a problem rather than invention of new things. However, lateral thinking is not a substitute for vertical thinking. They are complementary and need to be used based on situations posed.

The Ministry of Human Resource Development, India appointed the Department of Elementary Education NCERT to conduct an evaluation study in schools of Tamil Nadu. The study tried to explore the influence of activity-based pedagogy on learning outcomes. Activity based pedagogy was introduced in government schools for class 1-4 children in Tamil Nadu as a part of Sarva Shiksha Abhiyan. The report revealed teachers found the pedagogy suitable for children. Absence of fear resulted in active participation. The self-evaluation system helped children to learn concepts without burden. The stakeholders of the study- parents, teachers and community members pointed out, children were involved in trial-and-error methods of learning and were open to new ideas. They had space to explore their imaginations, which is a prime factor that encourages creativity. 43.5% teachers felt activity-based methods of teaching improved thinking skills among students. The traditional lecture method did not give children the opportunity to think, they were expected to replicate or reproduce content that was transmitted. However, with the new method teachers felt students came to accept that they have their voice and could express their thoughts freely. This encouraged them to think and construct their understanding (NCERT, 2011).

Hence it can be deduced that activity-based pedagogy alters the atmosphere of the class, methods of content dissemination, role of teacher, role of student in the knowledge building process. These changes directly impact the thinking abilities of children. It is observed that activity-based pedagogy gives children space to be involved in the peer learning process. This can have a significant impact on their communication and social skills. To explore this idea literature is explored in the following section.

## **2.6 Social Awareness, Interpersonal Relationships and Activity-Based Pedagogy**

Literature uses terms like social awareness, social development, and social intelligence to indicate abilities people need to lead a healthy social life.

Lev Vygotsky (1978) studied social development in children. His study revealed there is a connection between a child's cognitive functioning and their ability to connect with the social/ external environment around them (Vygotsky, 1978). Vygotsky considered learning as a social process in itself. His study considered teachers and parents as prime forces to socialize children with the external world. Schools carry immense potential to channelize a child's social experiences, which gives the child opportunity to develop one's social skills and intelligence.

Herbert Gardner (1983) conceptualizes social intelligence through intrapersonal and interpersonal intelligences. Intrapersonal intelligence helps the individual to understand one's feelings in various situations and gives them the ability to reflect on it. Not only one's feelings but it also helps the individual to reflect on conflicts one faces with their ideology, culture or their beliefs. On the other hand, interpersonal intelligence among children helps them to identify others' emotions, mood, similarities and differences that exist. Among adults this intelligence helps to identify others' intentions and desires. A high level of interpersonal intelligence is observed among leaders and therapists (Gardner, 1983). Interpersonal intelligence contributes to building relationships with other people.

Further an attempt is made to understand whether social skills and interpersonal skills can be developed in the classroom. Studies reveal child centric pedagogies like activity based learning help in enhancing these skills. Empirical papers that explore the link between these skills and activity-based pedagogy are referred to. Activity-based pedagogy as mentioned before gives freedom and space to children to construct their own understanding. In the process of engaging in activities children involve in interaction with peers, teachers, parents etc. Literature states these interactions help children to develop communication skills, decision-making, interpersonal skills and social skills. Empirical papers that explore these connections are referred to.

Moradi et al (2007) studied the influence of activity-based pedagogy implemented through group work on interpersonal skills. The study was conducted among high school students in Tehran. It was found out that group learning directly affects interpersonal skills. The students involved in discussion, negotiation, verbal and non-verbal communication to finish a task. The study claims children assigned individual responsibilities among themselves to complete a task. They worked towards a common goal (Moradi, Faghiharam, & Ghasempour, 2018). Shome et al (2011) observed similar outcomes in a study conducted in an Indian context. Shome et al introduced concepts of design among class 6 children.

The study observed outcomes generated by activity/project-based methods of teaching. Children were divided into groups and were asked to design and make a scaled model of a playground for a plot available in their campus. Children explored designs, chose materials and prepared a scaled model. In the process they communicated their design plans to their friends and gave feedback to each other. Continuous self and peer assessment took place. The study revealed along with the academic and technical learning children showcased social and interpersonal skills. They negotiated to reach a particular design, resolved disagreements and tried to reach their goal collectively. They clarified ideas to each other and shared tools to construct a scaled model. While considering the design of the playground they discussed social concerns like accessibility of their playground to everybody, having benches for senior citizens and safety concerns (Shome, Khunyakari, Natarajan, & Shastri, 2011). This study clearly establishes child centric pedagogy gives children freedom to express and it has the potential to develop core life skills like social and interpersonal skills among children. In the following section the link between self-expression, language and activity based pedagogy is explored.

## **2.7 Self-Awareness, Language and Expression**

The literature available uses the term consciousness synonymously with self-awareness. However, there is a clear distinction between the two terms. Consciousness is a state of mind where a person perceives information from the external environment (Morin, 2011). Self-awareness is a process of reflecting the external stimuli on one's own attitudes, traits, and perception. Robert A. Wicklund defines self-awareness as making oneself as an object of reflection. He asserts self-awareness as a mindful understanding of one's "sensations, emotions, feelings, thoughts, the physical body, relationships with others, and how these interact" (Wicklund, 1979). Geller and Shaver (1976) discuss the relation between self-awareness and cognitive processes. They conducted experiments on Brooklyn college students. One of the experiments revealed the narrative that establishes personal connection with students triggers self-reflective thoughts better than a neutral narrative that is far from their reality (Geller & Shaver, 1976). Hence, in this regard Morin claimed there is a connection between self-reflection and self-talk/inner speech. In self-reflection an individual makes oneself the object of focus. Inner speech facilitates self-reflection (Morin, 2011). Language becomes the medium to internalize and externalize inner speech. When human beings use language to communicate their thoughts are exchanged. These thoughts are an outcome of a self-reflective process. Communication shapes the self-identity of the person. Hence language is used as a tool to shape and share one's thoughts.

Kalaiyaran.M and Daniel Solomon (2016) points out self-awareness plays a prominent role in children and adolescents' life. It forms the basis for self-growth. Through the reflective process one gets the opportunity to constantly shape their strengths and work on weaknesses. It is pointed out that self-awareness develops in an individual from an early age but it can be shaped through creating positive external intervention in the form of modifying environment or circumstances. One such modification can be done through creating safe spaces for children to express in schools (Solomon & Kalaiyaran, 2016). In the traditional setup of the classroom behavior of children is extremely regulated. The child lacks freedom to express. The child fears judgment and thinks he/she is required to be right at all points of time. Often raising questions was seen as a sign of disrespecting the teacher and questioning their knowledge. This curbs free flow of thoughts and inhibits one from expressing. However gradual shift to child centric pedagogies like activity-based learning has brought change in the classroom management techniques. Activity-based pedagogy asserts the classroom is to become a safe space for the child to express freely. The activities designed should be able to involve children in discussion, negotiation of meaning and construct understanding for themselves. In this process of exchange the children get an opportunity to shape and work on their opinions, interests, likes, dislikes, strengths and weaknesses that initiate the process of becoming aware of themselves. Boostrom in his study asserts a classroom needs to be socially connected and no child should feel isolated. Feeling isolated can negatively impact the self-esteem of a person. His study reveals students learn better in safe classrooms (Boostrom, 1998). Holley and Steiner (2005) in their study discuss safe space implies an absence of judgment and discouragement from others. It does not mean acceptance of a student's ignorance without questioning or posing opposite views. The study found students experience

personal growth and self-awareness in the process of expressing themselves in the classroom (Holley & Steiner, 2005).

In this section the meaning of self-awareness and its effect on human social behavior were explored. To develop self-awareness among children modification of teaching methods to accommodate various opinions is explored. In the next section self-regulation in learning is explored. The attempt is to understand if activity based pedagogy gives an opportunity to regulate one's learning.

## **2.8 Self-Management in Learning**

The World Health Organization conceptualizes self-management in terms of “understanding, monitoring and regulating emotions” (WHO, 1997). Regulating emotions involves understanding how one's emotions can influence behavior. UNICEF conceptualizes “Self-management includes managing stress, controlling impulses, motivating oneself, and setting and working toward achieving personal and academic goals” (UNICEF, 2019). Extreme emotions can trigger unhealthy behavior. Unhealthy behavior can disturb oneself as well as people around hence regulating emotion is necessary for maintaining relations with others as well as one's own mental health (WHO, 1997). Montroy et al (2016) study investigates emotional self-regulation among children of 3-7 years. 1,386 children were part of this study. The study focused on how emotional self-management among children impacts learning in the classroom. In a classroom for learning to happen one expects the child to manage emotions and their behavior at various levels:

1. **Attention:** Ability to focus on the task/instructions.
2. **Working Memory:** regulating one's behavior based on rules placed in the environment.
3. **Inhibition/ inhibitory control:** Ability to control one's impulses or habits (Montroy, Bowles, Skibbe, McClelland, & Morrison, 2016)

Few factors that affect self- management in children are language skills, caregivers' style of parenting etc. Fabiane Puntel Basso et al (2018) study tries to identify a teaching method that fosters self-regulation. The study was conducted in a French school. Studies have revealed students with high levels of self-regulation have showcased better learning levels (Basso & Abrahão, 2018).The teacher's role is to facilitate and create a suitable environment for the child to construct their learning. Activity based learning also expects the same. However there is no empirical evidence stating activity based pedagogy impacts self-management in children. Theoretically activity based learning advocates for giving autonomy to students, giving them space to regulate their learning and evaluate themselves for future improvements.

## **2.9 Impact of Covid 19 on Life Skills of children**

The Covid pandemic has changed life beyond imagination. The Covid19's negative consequences are experienced by people of all ages, genders and social classes. Life of children was confined to home with major effects on learning, playing and development put to halt. The disruption of the life of children by covid has its detrimental effects on their academic learning, mental health, psychosocial and life skills development. Deeper analysis of the influence of Covid-19 on children's overall development is required to effectively respond to the adverse effects the pandemic has had/ is having on children.

Due to the Covid-19 Pandemic all the schools across the country have been shut down since March 2020. Very few schools reopened in November 2020 while many others resumed offline classes till February 2021. During the period of national lockdown, Indian students were observed to be largely engaged in self-study for three to four hours each day on average. Based on the survey study conducted by UNICEF in 6 states of India, 40% of the students have no access to any kind of online learning resources. Even 80 % of the remaining students felt that learning was significantly less through online mode. Also not more than 20% of the students had laptops/computers for online learning and the majority had to depend solely on their smartphones. In comparison to learning opportunities in schools, short-term self-study through remote learning resources has been determined to contribute the least to children's academic, social, emotional, psychological, physical, and cultural development (UNICEF, 2020)

Some of the reasons for the above condition are:

1. Reluctance in students to use remote learning resources
2. Less number of hours invested in learning by students.
3. Reduced engagement of teachers with children
4. Adverse Socio Economic condition of the family hindering the access to online learning resources
5. Technical glitches
6. Poor mental health of learners
7. Misconception about online learning (UNICEF, 2020)

School closures have a notable negative influence on children's learning. According to studies conducted outside of India, school closures have resulted in a decline in children's foundational skills development. Most students, particularly those from low and middle-income nations, are nearly a year behind in their studies. The children who are out of school are performing at far below level in comparison to children who have continued to attend school. This gap in learning has been found to widen with increase in age of the students (Conto et al., 2020).

Students in most private and government institutions who have access to various remote learning resources such as WhatsApp, YouTube and Live video sessions have found that learning is more successful in online mode than through the conventional offline scenario. The ability to explain abstract concepts through visual aids has made understanding various complex subjects much easier. It should be noted, however, that the aforementioned opinion represents only a subset of the population who have had access to high-tech equipment and these learning opportunities have been severely limited for marginalized youngsters without access to electronic gadgets and no access to the internet (UNICEF, 2020).

Therefore, one can say, the pandemic has had unequal effects on different segments of population. The Covid 19 situation has further widened the digital gap between the privileged and the underprivileged learners. The learning of children who are displaced, under resourced migrants, minorities, slum-dwellers and children with disabilities is largely at stake (Conto et al., 2020).

It is not just the academic learning but also the mental wellbeing of children that was severely impacted. The children living in conflict settings, unhygienic conditions and vulnerable situations are highly prone to stress and mental health challenges (United Nations, 2020). The unprecedented learning challenges aroused due to Covid 19 have led to the increase in the academic stress of the learners. The academic stress in turn wears down the academic performance, mental health and well-being of young children and adolescents. Enduring stress for long periods further makes children prone to physical health problems, depression, anxiety, and substance abuse (Pascoe et al., 2020 as cited in Mahapatra & Sharma, 2020).

The pandemic has not only adversely impacted academic learning but also social and emotional development of children. These children who are out of school due to the pandemic suffer by being deprived of physical learning opportunities, social and emotional support available in schools (OECD, 2020). Isolated from the educational world of learning together with friends & teachers in their own world called 'school' the students have lost social interactions of joy & play and are mostly becoming emotionally isolated. Such a scenario in kids' life for long periods can cause low self-esteem and develop notions of reduced self-worth among children. Further challenges faced by parents to engage their children while in isolation, lack of effective communication between teachers and learners are a few other factors that could have caused stress among children. Prolonged stress in children can lead to sadness, depression, restlessness, irritability, inability to deal with daily life challenges. They seem to develop a pessimistic attitude towards life, preferring isolation over social activities. Of the several stresses caused to students by Covid 19 pandemic, the academic stress has been the major causal factor for reduced performance, self-efficacy and ability in handling challenges & adversity of life (Yasmin, Khalil, & Mazhar, 2020)

In another study conducted during the ongoing pandemic, the children of all age groups were found to exhibit irritability, inattention, clinging behavior, increased dependency on their parents, separation related anxiety and fearfulness. It has further led to lack of motivation among adolescents to engage in academic activities, to be inquisitive and to develop inventiveness. Access to overload of content through the internet and lack of awareness about the threats the cyber world poses children

are more vulnerable to online bullying and abuse. Covid 19 pandemic has had a negative impact on the social and emotional development of children (Singh et al., 2020)

## **2.10 Conclusion**

The review of literature covers various aspects of English language education and Life Skills education in India. The articles and papers chosen range from Indian to foreign contexts. The literature reflects on the policy documents at national and international level. However there is no literature to establish a direct link between English language proficiency and Life Skills (self-awareness, social-awareness, relationship skills, decision-making skills and self-management) except self-esteem. There is a link between development of language proficiency and self-awareness, social-awareness and interpersonal-relationship but no literature establishes a specific and direct link between English language and Life Skills. Further, there is literature that claims activity-based learning enhances participation levels in the classroom. The review of literature could establish theoretical connections between Life Skills and activity based learning but limited empirical research is available in this area. No empirical research is available to connect activity based learning to self-management. However research establishes activity based learning gives children space for regulated learning and self-evaluation. The study shall attempt to evaluate the impact of English language programs on language levels and Life Skills. Also in the process the study shall try to understand the relation between:

- English language and self-esteem,
- Activity Based Learning and self-awareness, interpersonal-relationships, decision making skills, social awareness and self-management

The review also discusses literature on learning loss experienced by children worldwide as an adverse impact of COVID 19.



3

## CHAPTER 3: ASSESSMENT APPROACH AND METHODOLOGY

The research methodology chapter explains the approach and research techniques adopted in this evaluation study. The following subsections give details on the research design, sampling procedure and methodology, data collection process and analytical techniques.

### 3.1 Objectives of the Study

- To evaluate the learning outcomes in English language proficiency and Life Skills competencies of students of grade 7,8,9 and 10
- To design an industry-established framework for the assessment of the SiV program, or to co-create with DF a suitable assessment framework for the study
- To understand perspectives of stakeholders on the program
- To understand the effectiveness of the curriculum and pedagogy in the SiV classes
- To capture anecdotal impacts of the SiV intervention
- To compare DF SiV programs against existing best practices of the government and/or NGOs
- To make actionable suggestions and recommendations for improving program design, processes and implementation

### 3.2 Research Design

This study approached the research problem through a combination of qualitative and quantitative methods of data collection and analysis. Creswell (2012) calls this method a mixed method of research (Creswell, 2012). Here are a few reasons for opting this method. A combination of qualitative and quantitative data facilitates better understanding of the research problem and helps to triangulate the data. The evaluation study tried to assess the impact of an English language intervention program on learning levels and life skills among students. To assess the impact the students are divided into a control and experimental group. A three-year language intervention program was introduced to students. To assess the impact of the program, quantitative data was acquired through surveys and self-reporting tools. This data helped to compare learning levels in the control and experimental group. Further, qualitative data was collected through Focus Group Discussions.

This data helped to understand perspectives, opinions and views of people through interaction with stakeholders of the program and attain a holistic picture. success or failure of the English language intervention but the condition that affects the program and response of the stakeholders undergoing it.

However, the focus of this evaluation study was not input-oriented but outcome-oriented. Bertot and McClure (2003) identify learning outcome evaluation among other five types of evaluation. The learning outcome evaluation focuses on change in learning levels among people who underwent an intervention program (Bertot & McClure, 2003). This evaluation study is not to determine success or failure of the intervention, but to analyze factors like:

1. Attributes of the program

2. The population exposed to the program and at what level
3. The context of the study
4. The different kinds of effect produced – in this study, effects in terms of language proficiency and life skills (Suchman, 1977)

### 3.3 Methods of Data Collection

In this evaluation study, three main data collection methods were used: self-report tools, surveys and focus group discussions. Self-report tools are customized tools developed to understand the learning levels of students. Three tools were used for testing students' learning levels. One testing the English language proficiency, the second testing Critical thinking, and the third testing life skill competencies. The self-report tools for students were self-marked on paper under enumeration. The same set of tools were used for both SiV and Non SiV students. The next set of tools administered were surveys. Survey as a method of data collection was used to understand the general perceptions of the population in the study (Creswell, 2012). Hence a separate tool was developed for trainers, teachers, parents, school leaders and district officials only in the experimental group to understand their perspectives on the program. The surveys were administered through an online medium for teachers, trainers, school leaders and district officials while student and parent surveys were self-reported on paper. The next tool that was administered were focus group discussions. Focus group discussions are used to attain an in-depth perception, observation and thoughts of participants and it helps to encourage participants to reflect on the topic (Creswell, 2012). Focus group discussions were administered with students, trainers, parents and district officials only in the experimental group of the study. A list of tools is given below:

- **Students:**
  - a. Cognitive assessments: Self marked on paper under enumeration
  - b. Life skills assessment: Self marked on paper under enumeration
  - c. Focus Group Discussions (English language and life skills): Audio recording
- **Trainers:**
  - a. Survey on English language aspects: Self marked on Google forms
  - b. Focus Group Discussions (English language and life skills): Audio recording
- **Parents:**
  - a. Survey: Self marked on paper under enumeration
  - b. Focus Group Discussions: Audio recording
- **District Officials:**
  - a. Survey: Self marked on Google forms
  - b. Focus Group Discussions: Audio recording
- **School teachers:**
  - a. Survey: Self marked on Google Forms
- **School Leaders:**
  - a. Survey: Self marked on Google Forms

### 3.4 Sampling Procedure

This section discusses the sampling procedure in detail.

CGI proposed a two-level sampling method for the **cognitive assessments** of this evaluation. First, clusters were sampled, and then, schools were further sampled within the sampled clusters. This was achieved using widely-used sampling techniques.

**Probability proportional to size (PPS) sampling** is the most frequently used and recommended sampling technique. In stage 1, clusters were sampled as explained above. In the second stage, schools were sampled proportionate to their size using probability proportional to size sampling. Schools were sampled within each selected cluster, where the probability of selection of each school is proportional to the number of students in the school divided by the number of students enrolled in the cluster.

In this evaluation study, after identifying schools through the above method the stakeholders were identified using non-probability sampling strategies. Creswell (2012) defines non-probability sampling



as a strategy where not every participant in the population has an equal chance to get selected (Creswell, 2012). The nature of the study required specific categorization of the population based on the objectives. Hence, to identify the suitable sample among stakeholders, purposive and convenience sampling strategies were applied. Purposive sampling strategy is used to identify people who can elaborate on the specific themes of the study (Creswell, 2012), whereas convenience sampling strategy is used to identify the sample based on their availability and accessibility (Creswell, 2012). The stakeholders identified are: students, trainers, parents, district officials, school leaders and school teachers. Purposive sampling is applied in selection of students, trainers, school teachers and parents for focus group discussions, whereas convenience sampling is applied in selection of the district officials and school leaders .

**Students:** Self report tools and focus group discussions along with testimonials were used to collect data from students. The same set of tools were used for control and experimental groups.

Below the sample type corresponding to the tool and sampling strategies are discussed.

1. **Student assessments:** For student assessment in English language proficiency, Life Skills and Critical thinking, probability proportional to size (PPS) sampling was used. It is the most frequently used and recommended sampling technique. Schools were sampled within the district, where the probability of selection of each school is proportional to the number of students in the school divided by the number of students enrolled in the district.

**Self-Report Tool:** Self-report tools were used to understand the proficiency of students in English language and Life Skills. The self-report tool was given to all students to understand the learning levels among students.

**Focus Group Discussion:** The purpose was to select a sample that is representative of students from classes 7th - 10th or level 1 and level 2 categories of the program.

**Testimonials:** The perception of students on aspects of the program and self-observation was collected by interviewing the students. One testimonial from each center was collected.

2. **Trainers:** Surveys and focus group discussions were administered to collect data from trainers.

**Survey:** An online survey was shared with all the trainers who are part of the program. The purpose of the survey was to identify the general perceptions of trainers on the program.

**Focus Group Discussion:** A sample was selected using purposive sampling strategy. The purpose of the FGD was to understand the trainer's experiences with the program. The criteria of sampling were to select a sample that is representative of trainers who teach classes 7th - 10th or level 1 and level 2 categories of the program and have been a part of the program for at least two years.

3. **Parents:** Surveys and focus group discussions were collected from parents.

**Survey:** A survey was administered to all parents whose children are part of the program. This tool helped to identify parents' perception of the program and changes they observe in their child due to the intervention they are experiencing.

**Focus Group Discussion:** A sample was selected using purposive sampling strategy. The purpose of the FGD was to understand the parent's experiences with the program. The criteria were to identify parents whose children have been part of the program at least for one year.

4. **District Officials:** Surveys and focus group discussions were administered to collect data from district officials.

**Survey:** An online survey was shared with all district officials who are involved in the program.

**Focus Group Discussion:** To identify the sample from district officials, a convenience sampling strategy was used. This strategy is preferred over purposive sampling considering the accessibility of the officials. The focused group discussions with District Officials were carried out on an online conference platform.

5. **School teachers:** Surveys and focus group discussions were used to collect data on identifying spillover effects.

**Survey:** An online survey was given to the school teachers. Purposive sampling strategy was used to identify teachers teaching different subjects. Few subjects identified are: English, Science, Social Studies, Math. The purpose of the survey was to identify the spillover effects the intervention is creating in the regular learning environment of the child.

6. **School Leaders:** Survey was used to collect data on different roles and responsibilities and challenges comes with implementation of the program on school premises.

**Survey:** School leaders were provided with an online survey form. Convenience sampling strategy was used to identify headmasters/ Complex headmasters/ Headmasters cum Mandal Education Officers. The purpose of the survey was to understand the roles and responsibilities which come along with project implementation on the school premises under the supervision of school leaders.

### 3.4.1 Sample Size

It was proposed that 300 students from each grade for both treatment and control group will be assessed. Depending on the average enrolment size, 20 schools were sampled from 8 districts across Karnataka and Telangana to ensure representation. In each school, grades 7-10 were assessed while a minimum class-size of 4 from each grade was considered.

Table 1 and 2 below summarizes the number of SiV and Non SiV students who were assessed on English/ACT and Life Skills.

**Table 2. Summary of SiV students**

<b>SiV Students Summary</b>						
<b>Sandbox Name</b>	<b>Cluster Name</b>	<b>Number of Schools</b>	<b>Class 7</b>	<b>Class 8</b>	<b>Class 9</b>	<b>Class 10</b>
Hubli	Dharwad rural	2	7	33	25	18
Hubli	Hubli Rural	2	25	28	29	29
Hubli	Navalagunda	3	32	63	58	37
Hubli	Shiggaon	1	13	11	9	26
Hubli	Shirahatti	5	20	59	50	37
Kakatiya	Nizamabad	5	16	97	87	67
Kakatiya	Siddipet	2	19	23	28	48
<b>Total</b>		<b>20</b>	<b>132</b>	<b>314</b>	<b>286</b>	<b>262</b>

**Table 3. Summary of Non-SiV students**

<b>Non-SiV Students Summary</b>						
<b>Sandbox Name</b>	<b>Cluster Name</b>	<b>Number of Schools</b>	<b>Class 7</b>	<b>Class 8</b>	<b>Class 9</b>	<b>Class 10</b>
Hubli	Dharwad Rural	2	35	34	34	35
Hubli	Hubli Rural	2	25	24	28	29
Hubli	Navalagunda	3	37	35	48	33
Hubli	Shiggaon	1	13	15	15	17
Hubli	Shirahatti	5	49	58	65	64
Nizamabad	Nizamabad	5	66	60	64	57
Nizamabad	Siddipet	2	25	29	33	18
<b>Total</b>		<b>20</b>	<b>250</b>	<b>255</b>	<b>287</b>	<b>253</b>

Survey and Focus Group Discussions were administered with SiV students, parents, trainers, teachers, School Leaders and District Officials.

Table 4 below represents the numbers of participants (Students, Parents, Teachers, SiV Trainers, School Leaders and District Officials) administered in the study.

**Table 4. Total summary of Student Assessments, Survey, FGDs and Testimonials**

Category of Participant	Tools	Hubli sandbox	Kakatiya sandbox
SiV Students	English/Analytical and critical thinking and Life Skills	581	379
	Survey	581	379
	Focus Group Discussions	No. of FGD: 3	No. of FGD: 3
		No. of Students: 6-9	No. of Students: 6-9
	Case study	3	3
Non-SiV Students	English/Analytical and critical thinking and Life Skills	586	356
Parents	Survey	106	45
	Focus Group Discussion	No. of FGD: 3	No. of FGD: 3
		No. of Parents participated: 6-10	No. of Parents participated: 6-10
Trainers	Online Survey	12	11
	Focus group Discussion	No. of FGD: 2	No. of FGD: 2
		No. of Trainers participated: 4	No. of Trainers participated: 3-4
School Leaders	Online Survey	1	3
District Officials	Online Survey	3	1
	Focus Group Discussion	No. of FGD: 1	No. of FGD: 1
		No. of District Officials participated: 4	No. of District Officials participated: 3
School Teachers	Online Survey	4	10

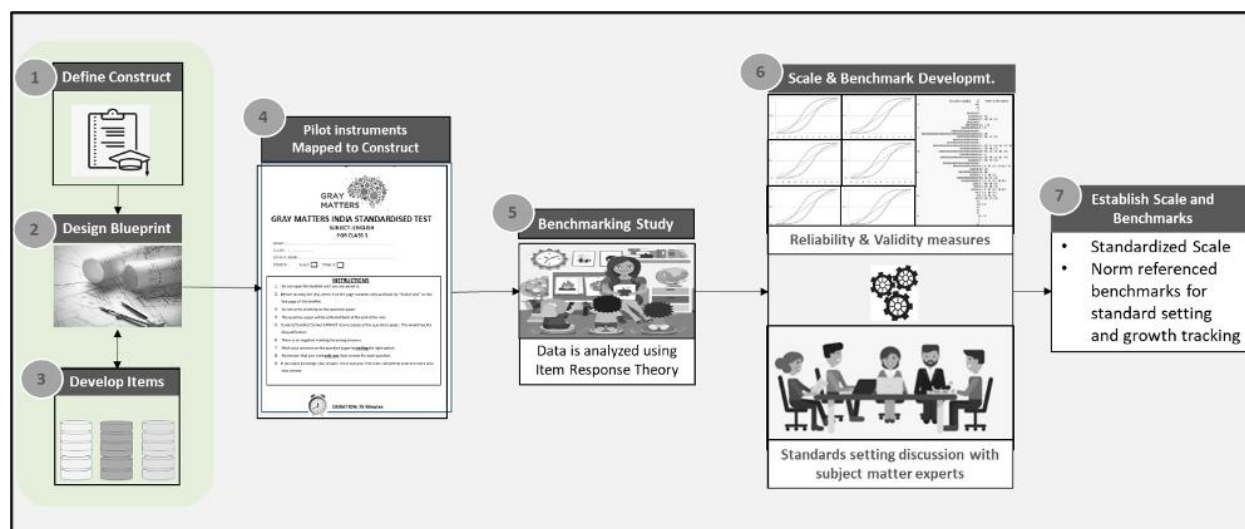
As part of the assessments, the total number of students assessed stood at 2,046. The total number of SiV students assessed in English/Analytical and Critical thinking and Life Skills stood at 960 while a total of 1,086 Non-SiV students were assessed in English/Analytical and Critical Thinking and Life Skills.

### **3.5 Frameworks: Tool Construction and Data Analysis**

#### **3.5.1 Cognitive Assessments Competency Framework**

CGI follows Item Response Theory (IRT) and develops assessment instruments which lend themselves to the requirements of IRT modeling. The test design and measurement model are 2-pillars of standardized assessments that are tightly interlinked. CGI has significant know-how and expertise in executing the right assessment design to meet the objectives of the study.

**Figure 3. CGI's standardised approach to assessments**



The learning construct defines the learning progression among students in any given subject. It is a detailed blueprint of the learning continuum that we expect students to demonstrate. It includes progression in concepts, student abilities and question types. It enables one to divide a measurement scale into performance bands and describe student abilities using standards defined in the construct.

The assessment instruments developed by CGI are designed to test the skills and topics illustrated in the table. To finalize the assessment framework, CGI shall map the SiV curriculum for each grade and make necessary design changes to ensure there is a balance of curriculum, range and type of test items that are to be used in the test instrument.

**Table 5. Assessment instruments**

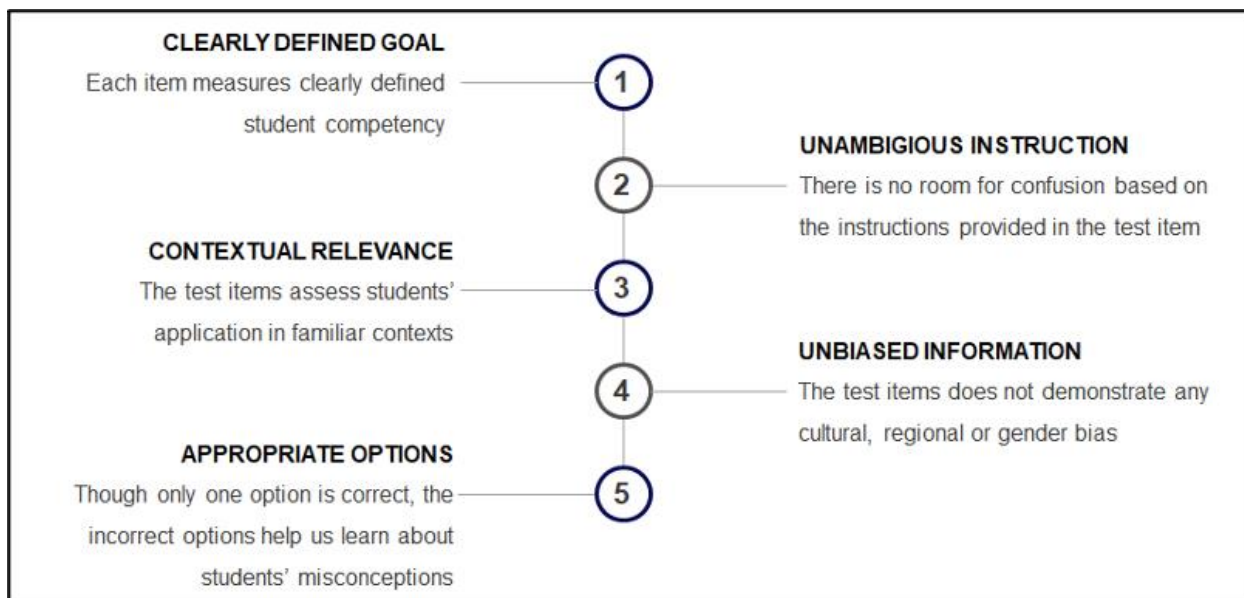
English	Critical Thinking
<b>Strands tested</b>	<b>Strands tested</b>
Contextual Use of Language Literal Reading Critical Reading	Verbal Reasoning Abstract Reasoning Numerical Reasoning

Next, a blueprint is developed for the assessment instrument. The continuum of learning construct is an all-encompassing universal set of skills that is covered in the curriculum. For the purposes of standardized testing within a limited time, core topics and skills are identified, weighted and assigned difficulty levels as per the grade to arrive at a blueprint of the test instrument.

The blueprint includes the total number of questions per test instrument, strands to be covered, topics within each strand and question types. The blueprint also includes specifications for the number of equating items required across grades. The test instruments are developed from the item bank according to this blueprint or assessment framework.

The next step is to develop test items based on the learning construct and the blueprint. Each item has a specific objective on what it is measuring based on the learning construct. The developed items are reviewed by a subject matter expert or panel of experts to ensure appropriateness of the test item, language used, clarity of answer choices and the distractors used in the answer choices. The items are also reviewed to ensure that there is no ambiguity in the way the stimulus is presented or there is no inherent bias in the item based on gender, region, culture etc. CGI follows global best practices in test item development which is listed in the figure below:

**Figure 4. Practices followed in item development**



As a function of executing multiple large scale projects, CGI has a curated item bank consisting of 6000+ items and further items shall be developed to cater to specific requirements that arise during the mapping of the SiV curriculum. The CGI item developers are experienced in developing school-level curriculum-based assessments in English and Analytical Thinking. Each subject team comprises resources with expertise and experience across the relevant classes of schooling (classes 6-9).

### 3.5.2 Life Skills Framework

In this section of the report frameworks of tool construction and data analysis are discussed. The student's life skill framework was used to understand the learning outcomes among children brought by the SiV program. The framework is customized and consists six life skill competencies:

1. Self-Awareness
2. Self-Management
3. Self-esteem
4. Social-Awareness
5. Relationship Skills
6. Decision making skills

These 6 competencies are defined and developmentally appropriate life skills standards were created to understand how competencies look at each grade and age. These standards helped to measure a child's learning levels. The learning levels of students were compared to the indicators to determine the overall life skills development among children. The framework is tabulated below.

**Table 6. Life skills framework**

<b>Students Life Skill Framework</b>			
<b>Competency</b>	<b>Definition</b>	<b>Standards</b>	<b>Indicators</b>
<b>Self-Awareness</b>	The ability of an individual to be aware has and recognizes one's own emotions, thoughts and behaviors. It is also assessing one's strengths & weaknesses for the purpose of one's own growth.	Understand and articulate one's own emotions	<ul style="list-style-type: none"> <li>• Understands complex emotions (jealousy, disappointment &amp; pride)</li> <li>• Understands the triggers to certain emotions</li> <li>• Understands influence of emotions on one's behavior                             <ul style="list-style-type: none"> <li>• Understands the influence of one's behaviors on others</li> </ul> </li> </ul>
		An awareness of how one's behavior influences others	
		Accept one's own emotional state	
<b>Self-Management</b>	The ability of an individual to balance and regulate one's own emotions and behaviors in diverse and challenging situations.	Regulate one's emotions and behaviors in all situations	<ul style="list-style-type: none"> <li>• Analyses and develops steps to be taken to persist through the challenging situation</li> <li>• Understands challenges in fulfillment of their needs</li> <li>• Understands that one's needs vary according to situation</li> </ul>
		Understand one's emotional strengths and limitations while responding to situations.	
		Advocating for oneself & one's needs	
<b>Social Awareness</b>	The ability to acknowledge others' perspective; empathize with others' feelings and ideas and ability to respect similarities and differences of all people, groups and cultures.	Identify and empathize with feelings and perspective of others	<ul style="list-style-type: none"> <li>• Understand similarities and differences in different social and cultural groups</li> <li>• Understand influence of social and cultural diversities on one's behavior</li> </ul>
		Knowledge of the acceptable behavior based on norms	
		Understand and respect similarities and differences of different social and cultural groups	
<b>Relationship skills</b>	The ability of an individual to establish and maintain healthy relationships with others.	Able to use different modes (verbal and non-verbal)for effective communication	<ul style="list-style-type: none"> <li>• Identifies the aspects of effective communication with the help of an adult</li> </ul>

		Demonstrate the ability to address conflict situations in constructive way	<ul style="list-style-type: none"> <li>• Understands the benefits of effective communication</li> <li>• Understands one's behaviors are influenced by others' opinions and actions</li> </ul>
		Receives and provides feedback constructively	
<b>Responsible Decision Making</b>	The ability of an individual to understand and make appropriate decisions according to the situation and being accountable to the consequences of the decisions made.	Develops critical thinking and implements one's own decisions	<ul style="list-style-type: none"> <li>• Identify and describe problem situation - Activity allows for qualifying the intensity of problem only</li> <li>• Identify and understand a problem situation can have multiple responses</li> <li>• Understands one's decisions could have different outcomes</li> </ul>
		Make decisions that are safe for self and others while considering the ethical and civic norms	
		Approaches new situations with curiosity and an open mind in order to make decisions	
<b>Self-esteem</b>	The ability of an individual to evaluate oneself and trust one's capabilities.	Recognize one's own strengths and weaknesses and that they can be addressed for personal growth	<ul style="list-style-type: none"> <li>• Evaluates oneself to improve.</li> <li>• Recognizes one's strengths and weaknesses for personal growth.</li> <li>• Identifies ways how they can contribute.</li> <li>• Resists social pressure.</li> </ul>
		Evaluates situations to identify setbacks and challenges and decides on actions to be performed.	
		Believes in one's capabilities and actively contributes to school and community.	
		Understands and resists social pressure constructively to secure one's social and emotional environment.	



### 3.6 Data Analysis

#### 3.6.1 Cognitive Assessments: Rasch model

CGI uses modern educational measurement methods like Rasch Modeling to analyze and report the results. Student learning outcomes are reported using an achievement scale. Students across classes are reported on a single scale and mean comparisons are reported. All comparisons shall be made using mean scale scores and scores in subject-specific strands.

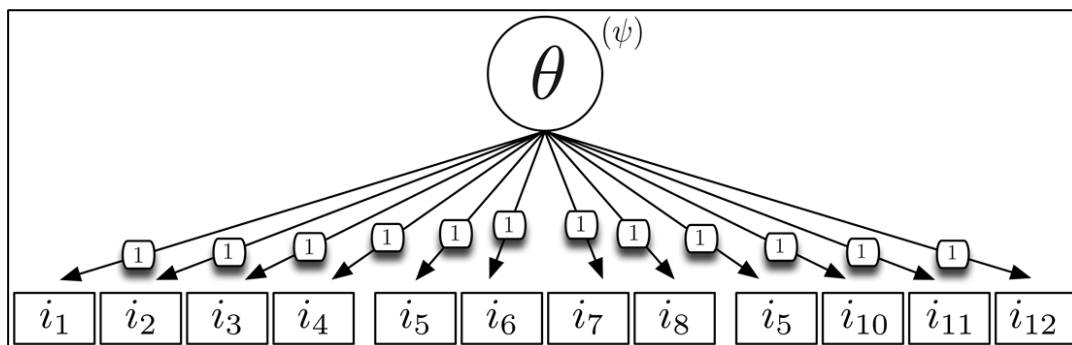
The Rasch model allows the difficulty of items from different test forms to be brought together on the same scale. This allows us to define the continuum of learning on the same scale (Vertical Scale) therefore making it possible

- a) to examine the relative achievements of students from different classes and cohorts, and
- b) to monitor the achievements of individual students and cohorts of students over time.

The Rasch model is the simplest IRT model, yet the most elegant and still most widely used.

- A person's measure on any trait is a simple function of their ability and the item's difficulty.
- A person's ability can be conditioned (removed) from sample estimates making item calibration sample free (or assume a distribution of abilities) (CML vs. MML).

**Figure 5. Item calibration on CGI's Pinnacle scale**

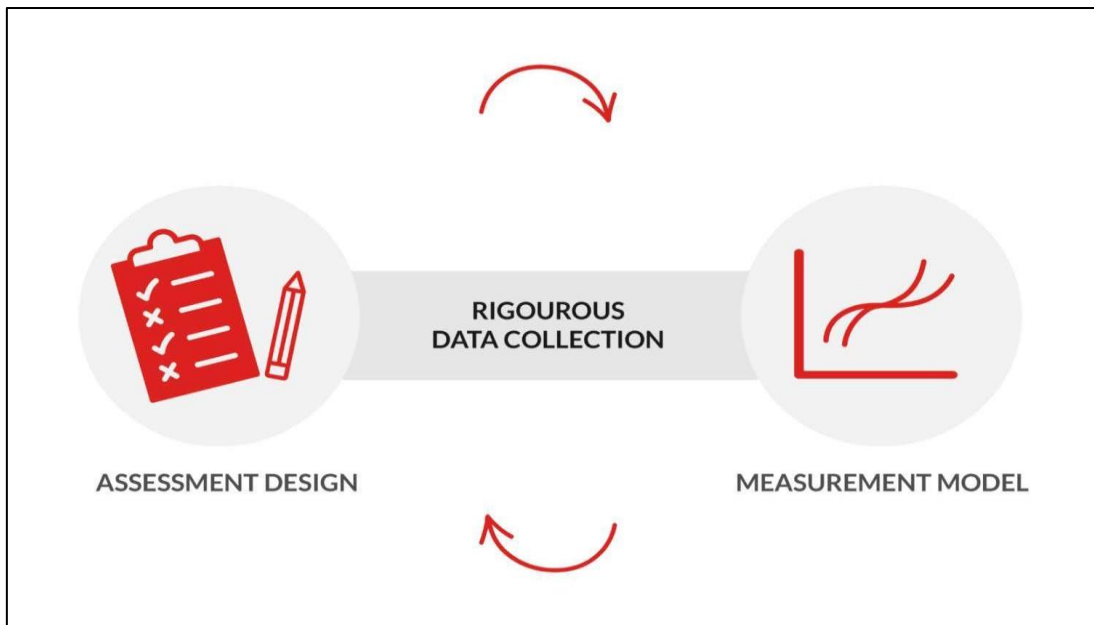


#### Data Analysis

CGI treats data integrity with extreme rigour. Having conducted high-stake assessments that determine the future of thousands of children and millions of dollars of funding, we take extreme care with respect to data quality.

One aspect of this is taken care of in the invigilation/survey phase where we inculcate the seriousness in our enumerators. However, in light of the ground realities, in large scale operations, we have also instituted a pattern check algorithm that scans the data sets for any signs of compromise. For example, if surveys collected by one enumerator have more than 60% similar responses (criteria may vary) those surveys are treated differently due to bias and possible cheating. Once flagged, the CGI team investigates the situation and takes a decision on retaining or dropping the flagged data. This is also used to flag copying during assessments. As a combination of all the above, we have a high degree of confidence in the quality of data that we analyze and therefore the results it provides are accurate and can be confidently used for high-stake decisions.

CGI analysis of learning relies on two pillars – Assessment Design and Measurement Model. These are highly interlinked elements that feed into each other in an iterative manner producing more and more robust measures with large quantities of data. CGI believes in robust tool design, rigorous data collection, and finally an accurate measurement model, with an appropriate statistical basis in order to ensure that the results indicated are as close to reality as possible.

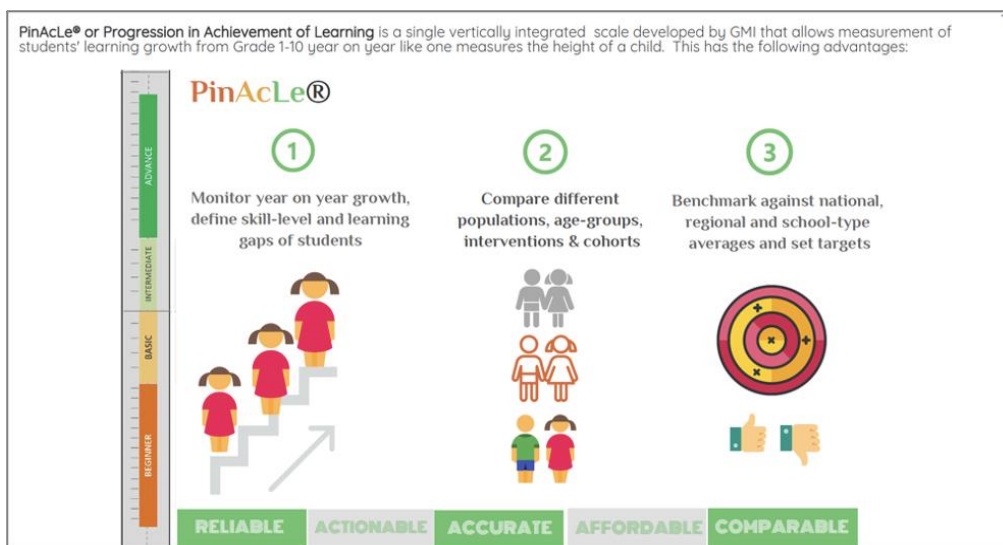


CGI uses Rasch Modeling to analyze and report the results. This model allows students’ ability estimates in an area of learning, to be placed on the same scale as test item difficulty estimates. This means that when test items directly address curriculum learning outcomes, the performance of students can be described in standards statements that relate to student competencies.

The Rasch model allows the difficulty of items from different test forms to be brought together on the same scale. This allows us to define the continuum of learning in each subject from classes 6 to 9 on the same scale (Vertical Scale) therefore making it possible to examine the relative achievements of students from different classes and cohorts to monitor the achievements of individual students and cohorts of students over time.

Using this methodology CGI has built a proprietary scale that allows us to track student progress across the years, not just as a score but specifically with respect to skills gained by students over a time period. The scale also allows us to compare cohorts from different years and between cohorts. This allows for a flexible yet accurate study design. PinAcLe also allows us to set targets - which has been one of our critical value additions in projects that require accurate tracking of skills. The advantages of the scale are illustrated in schematic below:

**Figure 6. Characteristics of CGI’s PinAcLe scale**



Our reports are easy to use and actionable. The reporting is automated on the CGI analytics platform for quick turnaround.

CGI's vertical continuum reporting mechanism allows for data representation in an actionable manner.

### 3.6.2 Data Analysis: Life Skills

Marshall and Rossman (1999) define data analysis as "the process of bringing order, structure and meaning to the mass of data collected" (Marshall & Rossman, 1999). It helps to interpret, theorise and form a general understanding. Antonius (2003) points out the term data refers to systematic collection of information from the target group. He points out data analysis is systematic interpretation of the data to enable the reader to gather meaning (Antonius, 2003). In this study data for analysis is drawn from surveys, self-report tools and focus group discussions.

For **quantitative data**, which was obtained from surveys and self-report tools - statistical analysis is applied. Descriptive statistical measures helped to summarise the data. Mean as a measure is used to summarise the data. Inferential statistical measures help to estimate, predict, hypothesise and gather evidence to understand a phenomenon. These measures are used to identify trends and relation between variables (Cohen , Manion , & Morrison , 2007). To understand if the intervention has caused any significant change in learning levels among students, an independent sample t-test at 0.05 level significance was applied. T-test helps to compare the average mean performances of students in the comparison and intervention group (Cohen , Manion , & Morrison , 2007). The data was analysed using T tests at following levels - 2 states, 7 clusters and 20 schools. The data is reported in descriptive format with graphical representations wherever possible. One way ANOVA at 0.05 level of significance was applied to understand the impact of the intervention on students who attended the program 1, 2 and 3 years. Further one way ANOVA was applied to understand the impact of the online intervention on students who did not attend the SiV classes, irregularly attend the SiV online classes and students who attended the SiV online classes regularly.

The **qualitative data** was obtained from focus group discussions conducted with Students, Teachers, Parents and District Officials. Lawrence Newman's (2011) coding technique was used to code the data collected. Three codes were developed to sieve the data:

1. **Open** – Open codes help to reduce the data and identify the prevailing phenomenon.
2. **Axial** – Axial codes help to classify common ideas. They help to identify sequences and patterns in the collected data.
3. **Selective** – Selective codes help in identifying core concepts and interlinks from which the themes will be derived. (Neuman, 2011)

Further the qualitative data was segregated in themes for the purpose of analysis. The interplay of themes helps to evaluate the outcomes of the program.

### 3.7 Establishing Validity and Reliability

Validity and reliability are the utmost concern of conducting this study. To establish validity and reliability, careful sampling procedures, appropriate instrumentation and statistical treatments of the data will be followed. Personal biases will be avoided and the findings will be drawn directly from the data collected.

Test reliability is the overall consistency of the measure. For the **quantitative data** collected through the **cognitive assessments**, the model tests the degree to which scores are consistent over time and groups of students.

**Cronbach's alpha:** The most widely used measure of test-score reliability is Cronbach's alpha, which is a measure of the internal consistency of a test. CGI ensures that Cronbach Alpha of all its tests is >0.8, which is internationally accepted.

The analysis helps establish the reliability of the test instrument, estimate item difficulty, measure item correlation, item fit and gender differential item functioning. Based on the analysis, required changes are made to the assessment instruments to ensure that the measurement is reliable and valid. The items are mapped by difficulty against student ability using Wright Maps as shown below.

#### Figure 7. Wrights Map showing item difficulty against student ability

<pre> 2      X  28       Xxx  21       xx  26       xxxxxxx        xxxxxxx  25 29       xxxxxxx  12 30       xxxxxxx        xxxxxxx  18 24       xxxxxxxxxxxxxxxxxx  10 22 23       xxxxxxxxxxxxxxxxxx  11 20       xxxxxxxxxxxxxxxxxx  17 27 1      xxxxxxxxxxxxxxxxxx  19       xxxxxxxxxxxxxxxxxx  6 13       xxxxxxxxxxxxxxxxxx  9       xxxxxxxxxxxxxxxxxx  16 0      xxxxxxxxxxxxxxxxxx        xxxxxxxxxxxxxxxxxx  8       xxxxxxxxxxxxxxxxxx  14       xxxxxxxxxxxxxxxxxx  7 15       xxxxxxxxxxxxxxxxxx  1       xxxxxxxxxxxxxxxxxx  4       xxxxxxxxxxxxxxxxxx        xxxxxxxxxxxxxxxxxx  5       xxxxxxxxxxxxxxxxxx  -1     xxxxxxxxxxxxxxxxxx  3       xxxxxxxxxxxxxxxxxx  2       xxxxxxxx        xxxxxxxx        xxxxxx        xxx        xx        xx  </pre>	<h2 style="text-align: center;">RASCH MODEL &amp; ANALYSIS</h2> <p>Rasch analysis is a psychometric technique that improves the precision with which we construct instruments, monitor instrument quality, and compute respondents' performances</p> <ol style="list-style-type: none"> <li><b>01 TEST ITEM FIT</b> It is a correlation between the student performance in the item and in the test. It tests the item construct and the concept underlying the test item.</li> <li><b>02 TEST ITEM VALIDITY</b> Differential item functioning is a potential source of item bias. Eg. Gender bias, Rural/Urban bias etc</li> <li><b>03 TEST RELIABILITY</b> It is a measure of how reliable is the measurement of a person's ability.</li> <li><b>04 DIFFICULTY ESTIMATES</b> Item difficulty is estimated in the Rasch model by analyzing student responses from the sample.</li> </ol>
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The analysis includes distribution of student scores by subject, classes and competency allowing us to highlight differences in strengths and weaknesses in student competencies based on gender, socio-economic status (if data is available), district, block and other relevant factors.

Then we develop a standard measurement scale and a conversion table to convert raw scores to scale scores based on the Rasch model. The scale enables one to compare performance of students across cohorts and measure growth longitudinally over time. The scale is divided into performance bands and each band is described qualitatively by using standards statements (abilities demonstrated by students in the band). We shall link test instruments of classes 6 to 9 using anchor items and represent them.

For **qualitative data** Lincoln and Guba's (1985) approach to establish reliability in terms of trustworthiness is adopted. They identify four criteria: "credibility, transferability, dependability and confirmability" (Lincoln & Guba, 1985). To establish credibility of the data collected, more than one tool is used in this study. Self-report tools, surveys and focus group discussions are used to establish credibility of the data collected. Different stakeholders were involved in the study to attain various perspectives to establish credibility. To establish transferability of the data, the focus group discussions were audio recorded with consent and transcripts were maintained. To establish validity, tools were reviewed by research and subject experts. Further the data was triangulated to establish validity. Tool triangulation is a method where more than one tool is used in data collection. This helps to balance and compare perspectives of different stakeholders. Investigator triangulation was established in the study by involving more than two investigators (Lincoln & Guba, 1985). In the next section risks involved in establishing credible results are discussed.

### 3.8 Risks and Limitations

1. This evaluation study is dependent on participation of stakeholders in the data collection process. However, due to the prevailing pandemic circumstances there was a high risk of low participation that affected the results of the study.
2. As reported by the SiV team, there were no interventions for the participant students of batches (2018- 2019 and 2019- 2020) for one and a half years from SiV as well as regular schools due to Covid. Class 9 and 10<sup>th</sup> SiV Students have been exposed to only 1 year of SiV. The remaining years of learning were affected due to the learning gap created due to covid. The ambiguity and uncertainty due to covid has made an impact on the program implementation. This study has considered this gap and approached to mitigations through the following ways:
  - i) The tool design was built keeping in mind the impact of covid on student learning.
  - ii) The interpretation of the data considers these varying factors.

3. The shift to online learning has created a digital gap across India. Some students who could access online platforms were exposed to SiV intervention while some students could not access these platforms and were deprived of program intervention.



## CHAPTER 4: PROJECT EXECUTION AND TEST ADMINISTRATION

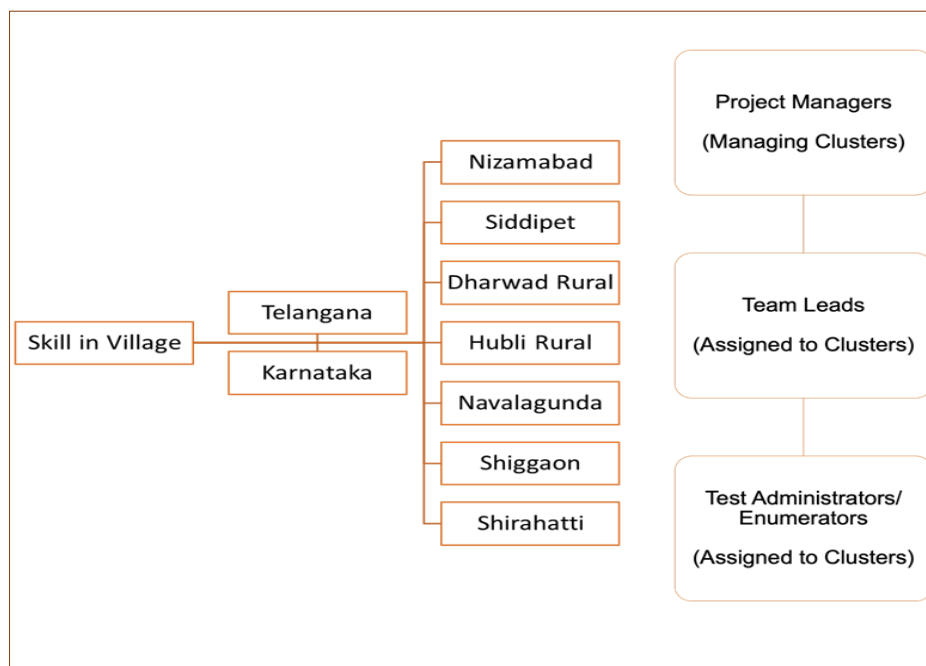
### 4.1 Project Execution

This section covers the process CGI and LCF teams followed to administer the tests. CGI and LCF follow a standard procedure in conducting assessments thus making the Test administration process rigorous and robust in nature.

#### 4.1.1 Project Management

CGI is unique amongst assessment companies in India, in having significant on-ground experience in independent test administration. While most agencies take on assessment design, CGI has been heavily involved in conducting large scale assessments of 100-150 schools on a single day. CGI has also worked with reputed national and international clients in multi-stakeholder environments, and high compliance requirements. Given this experience, CGI has instituted process and project management checks and communications that allow for seamless tracking for project execution.

**Figure 8. The test administration team structure**



## 4.2 The Project Team

**Core team:** The core team at CGI handled the project at macro level. The key responsibilities of the team range from Research designing and planning, Project management, Operations management, and Data Analysis.

**Team Leads:** The key engagements on field with stakeholders and deployment of work plans was ensured to run smoothly and managed by the team leads.

**Test administrators/Enumerators:** The enumerators were hired on contract by the CGI team and trained by the core team. The enumerators implemented the assessments at classroom level.

## 4.3 Test administration Process

This section covers the standard procedure CGI follows to administer the assessments.

The figure below gives an overview of the major activities performed to administer the assessments.

**Figure 9. An overview of the test administration process**

TRAINING	PREPARATION	ADMINISTRATION	COLLECTION	DATA ENTRY
<ul style="list-style-type: none"><li>• Qualified resources are hired on contract</li><li>• CGI trains resources on test administration</li><li>• CGI appoints own executives to audit assessments</li></ul>	<ul style="list-style-type: none"><li>• CGI prints assessment papers</li><li>• Papers are arranged in school specific sealed packets</li><li>• Sealed packets are distributed to the hired resources during training</li></ul>	<ul style="list-style-type: none"><li>• One resource is assigned one grade in each school</li><li>• CGI Team lead is assigned to ensure assessments are happening smoothly</li><li>• Independent audit is carried out by CGI executive</li></ul>	<ul style="list-style-type: none"><li>• CGI appoints resources, collects all the response sheets after the assessment and courier it to CGI's data processing centre</li></ul>	<ul style="list-style-type: none"><li>• All the test responses are reconciled and digitized at its data processing centre</li><li>• A quality control team checks 10% of the data digitized for accuracy in data digitization (&lt;2% errors)</li></ul>

### 4.3.1 Training

CGI treats training of invigilators and surveyors as the critical step in ensuring that the data collection process remains uncompromised. A team of enumerators personnel was hired by CGI. All CGI field representatives underwent a full-day training before every data collection phase. The training is always conducted a day 2-3 days prior to data collection kick-off. These resources would be graduates with local knowledge, typically residents close to one of the test administration Centers (TACs). Each TAC was led by a TAC manager to manage the test administration and troubleshoot with the CGI team as needed. The training covers the following topics:

- Purpose and project context
- Behavior in school
- Child safeguarding policies
- Orientation on tools designed to assess English, ACT and Life skills
- School allocation, directions to travel, etc.
- Assessment day - packing, transport, scheduling, instructions, administration
- Processes to be followed during invigilation
- Checklists and process documents to be completed
- Post-assessment logistics
- Roles and responsibilities at each stage
- Troubleshooting

CGI has conducted hundreds of training workshops for its representatives and trained them on broad objectives of the assessment study. Assessment tools and standardised processes to implement assessments. The enumerators collected, distributed and returned the assessment papers after the

test. CGI has established processes, videos and print material that enable our enumerators to be effective on the field.

CGI is committed to recognising, promoting, and protecting the rights of all children. CGI believes that the welfare of children is the highest priority and that is the responsibility of everyone who works for CGI and with CGI to ensure that children are protected from exploitation or abuse. CGI representatives working with or having contact with children are expected to treat all children with respect and dignity, always prioritising the child’s safety and well-being. We expect the highest standard of behaviour from our representatives and strive to ensure adherence to our standardised procedure. For a more comprehensive understanding of CGI’s Child Protection Policy, please find it attached in the Annexure section below.

Here are a few snapshots of activities from the assessment process documents for invigilators.

**Figure 10. Snapshot of instructions for resource persons - extracted from training manual**

**Training Process Flow**

**A. Pre-Assessment Activities**

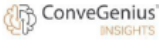
1. Attend the Training, take notes of key processes and understand the processes to be followed
2. Collect the Training Manuals
3. Know your School
4. Collect the Assessment Materials (Sealed Question papers bundle, School Information, Attendance form, Reconciliation Form, etc.)

Documents Checklist	Activities
<p>Please ensure that you have collected the below documents for each school:</p> <ul style="list-style-type: none"> <li>✓ Question Papers</li> <li>✓ Reconciliation form (1 per school)</li> <li>✓ Attendance sheet (1 per class)</li> <li>✓ Covid Kit</li> <li>✓ Packet seal check form</li> <li>✓ Covers for packing (if provided)</li> </ul>	<p>In case required and instructed, please follow the below activities:</p> <ul style="list-style-type: none"> <li>✓ Call the partner organization’s representative (a day before assessment)</li> <li>✓ Explain the assessment process</li> <li>✓ Ask about location and find out how to get to the school</li> </ul>



**Figure 11. Do's and Don'ts to be followed during the assessment process - extracted from the training manual**

**ASSESSMENT TRAINING MANUAL**



**On the FIELD – DO's and DONT's "DATA CANNOT BE COMPROMISED"**

DO's

1. Follow the instructions
2. Wear formal clothes and maintain the decorum and professionalism at all stages and be on time.
3. Conduct test in the absence of teachers & Principal
4. Check if students are marking the options clearly
5. Ensure seating does not allow cheating
6. Speak politely and answer queries, to the extent possible. (In case of any subject matter which you are not aware of please do not commit, promise to get back with an answer, and communicate with Project team member immediately).

DONT's

1. Do not read out any part or full questions or option to children
2. Do not explain questions to the students – if they are unable to read a word/sentence, you cannot read it to them
3. No fellow or teacher should be present in the exam hall during the assessment time
4. Do not help students or allow teachers or Fellows to help if they are present.
5. Do not get into any argument on the field with any party – School principal or teachers.
6. In case of a non-cooperative teacher, try to speak to the school principal if he/she is supportive; if not, your trainer should be informed.
7. In case of any malpractice during the student test (like students discussing, teacher's presence in class or helping) which affects sanctity of data, immediately inform Project Lead. In case school principal is supportive, get his/her help and resume the test after speaking politely to the respective teacher as well.
8. Despite all the effort if things go out of hand, please don't hesitate to inform the Project Lead regarding the situation.

#### **4.3.2 Deployment**

Post the training, the administrators were provided with a schedule of schools that they must cover each day. A CGI project manager and Team lead worked with the administrators to optimize the travel and maximize school coverage based on school and administrator location. Team Leads coordinated with a group of around 10 administrators, and follow-up to ensure that data collection is conducted as per the plan and schools have the appropriate communication.

During each data collection phase, requisite numbers of CGI Project Managers (based on scale of operations) were present on the ground. They are available to troubleshoot and resolve issues providing a helpline to the enumerators and also conducting spot checks and audits in a sample of schools to ensure that administrators are following the appropriate process.

#### **4.3.3 Data Integrity**

CGI treats data integrity with extreme rigour. Having conducted high-stake assessments that determine the future of thousands of children and millions of dollars of funding, we take extreme care with respect to data quality. One aspect of this is taken care of in the invigilation phase where we inculcate the seriousness in our administrators. However, in light of the ground realities, in large scale operations, we have also instituted a pattern check algorithm that scans the data sets for any signs of compromise. For example, say, the data collected by one administrator has more than 60% similar responses (criteria may vary). Once such discrepancies are flagged, the CGI team investigates the situation and takes a decision on whether to retain or drop the flagged data. This is also used to flag copying during assessments. As a combination of all of the above, we have a high degree of confidence in the quality of data that we analyze and therefore the results we provide are accurate and can be confidently used for high-stake decisions.

#### 4.4 Data Capture: Digitization of assessments

CGI and LCF conducted the students' assessments in an offline mode by a pen and paper test. The responses were recorded in the papers and sent back to CGI for digitisation before data cleaning, analysis and pattern checking can take place. Surveys for certain stakeholders were conducted online (through Google Forms), which captured the data directly into a digital format. The Focus Groups Discussions were audio recorded, from which the transcriptions were extracted for data analysis.

#### 4.5 Logistics and Support

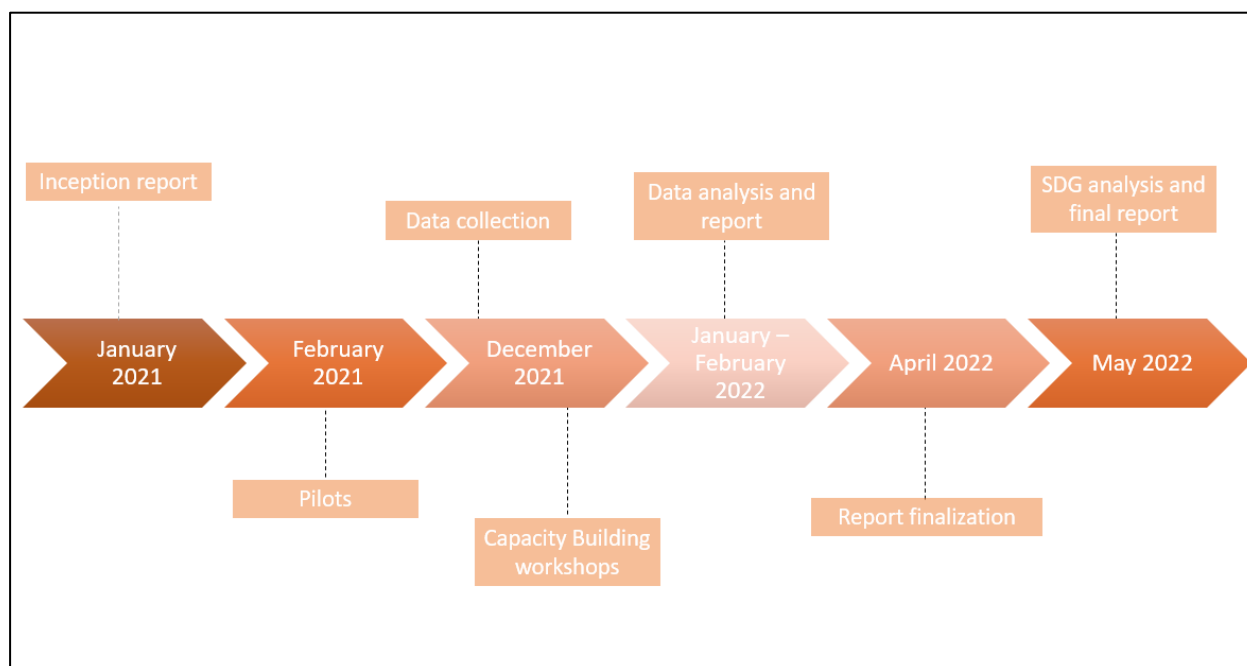
Throughout the course of engagement for this program assessment study, CGI and LCF received assistance, information, and support from DF. This included the following:

- Sharing of program details and responding to our queries
- Supporting CGI and LCF in finalizing the tools
- Providing student and other stakeholder details for sampling
- Providing support in mitigating risks as identified in the 'Risks and Limitations' section and suggesting alternatives for working around the limitations
- Guiding and supporting CGI throughout the program in planning and execution

#### 4.6 Timeline and Phases of Evaluation

The program assessment study process has been divided into the milestones given below.

**Figure 11. Milestones achieved during assessment study process**



**Objective:** The capacity building workshops were conducted by CGI and LCF team to help the SiV team to understand the assessment framework and process.

The capacity building workshops were organized by CGI and LCF team through an online medium. The participants were SiV program managers, cluster heads, trainers and other team members of Deshpande Foundation. The workshop was conducted in two sessions.

The session on CGI's assessment methodology covered the following aspects in detail:

1. The pillars of assessment
2. Approach to assessments
3. Tool Design and development
4. Scale development
5. Assessment Design
6. Measurement Model
7. Sampling methodology

The session on assessment methodology for Life skills covered the following aspects in detail:

1. Familiarizing Framework- Process of development and how was the framework utilized
2. Process of tools development
3. Assessment Criteria
4. Coding quantitative data from self-reported tools
5. Coding qualitative data
6. Process of developing Testimonials



## CHAPTER 5: DATA ANALYSIS AND FINDINGS

This chapter presents the findings of this evaluation study, which were obtained from various analyses. The analysis has been presented separately for qualitative and quantitative data. The chapter presents the qualitative findings followed by quantitative. The chapter further covers the Qualitative findings from the data collected using Focus Group Discussions from students, parents, trainers, and district Officials.

The quantitative data collected from students includes English, Analytical and Critical Thinking (ACT) and Life skills subjects while data collected from students, parents and teachers using surveys is also presented in the subsections of Quantitative analysis.

The data has been analyzed at state-level, cluster level in this report.

### 5.1 Qualitative Data Analysis

Skill in Village (SiV) Program was initiated in 2017 by Deshpande Foundation's skill development training center at Deshpande Educational Trust (DET). SiV is an English language intervention introduced in rural regions of Telangana and Karnataka by DF. The objective of the program is to build English communication skills among the students by covering the core essentiality of the 4Cs – Critical thinking, Communication, Culture, and Creativity and also inculcate 21st-century skills like creativity, collaboration, critical thinking and culture over a period of time. To understand the stakeholders' experiences of being a part of the program, focus group discussions were conducted with students, teachers, parents, SiV trainers and district officials. In this section the data obtained from the stakeholders is discussed.

#### Students' Experiences

Students express that the 3 years of Skill in Village intervention has a positive impact on them. They find the activity-based pedagogy engaging and has made learning English joyful and productive. They mention the activities designed are a balance of both indoor and outdoor tasks. In the online sessions trainers adapted their teaching methods and designed suitable activities that could be delivered through the online medium. Students have reported they enjoy the process of learning in their SiV classes.

A student shared –

*“In activities we usually have games through which we learn how to balance daily tasks, how to follow instructions, how to give instructions, how to behave with others, how to present ourselves to people, how to communicate with others, coordinating with the group. When we participate in activities, we enjoy learning.”*

Students report that the reading materials provided by DF were engaging and helped them to practice

reading, writing and building vocabulary. They believe that they are able to read and understand English content better. Students discussed, earlier they struggled to read and spell English words and now they are capable of writing full sentences in English. They share that they are able to have meaningful conversations in the English language among their peers. Along with improvements in English language their confidence levels have improved, and they actively participate in academic sessions. Students assert that the SiV classes have not only benefited them in learning English but also other regular subjects. They understand concepts taught in regular classrooms quickly and easily. Students attribute their improvements to the program and SiV trainers, who they describe being inspiring, encouraging, understanding and approachable.

A student shared-

*“We can read text in English quicker and our understanding of Grammar is improved. Learning from the SiV class also helps in understanding subject classes. - We used to have group work and project works in SiV classes and we liked them. We have learnt the family introduction and self-introduction. General English is also getting better. In regular classrooms, they teach what we need for class but in SiV they teach what we need for our regular conversations with everyone.”*

Students elaborate on the reasons why they joined the SiV program and mention that they believe the SiV program will be helpful for them in pursuing higher education and seeking better job opportunities. They believe that it will build their communication skills and that will open channels to understand and mingle with people from different cultures.

A student share-

*“We feel proud of ourselves for being able to learn reading, writing and speaking in English with others. There are many important people who visit our school. This helps us to aim bigger and higher.”*

Students share a significantly positive perception of the SiV program. To understand other stakeholders' experiences and views trainers were approached.

### **Trainers' Perception on Skill in Village Program**

Similar observations were made by SiV trainers. SiV trainers who have been part of the program for at least two years were approached to understand their experiences. Trainers shared that the SiV program has contributed to their student's learning as well as their learning. They mention that they receive academic support in the form of training from the foundation, which helps them develop more creative teaching strategies and learn the academic content. They express that they receive support to deliver the program to students at every step. They report, cluster heads are supportive and provide constructive feedback, help resolve issues with schools and communicate regularly with them. Trainers believe that students have improved in English language skills and life skills. They notice improvement in time management skills, relationship skills and overall behavior in children.

A trainer shared -

*“We feel proud when the child understands and reads by themselves. We call and inform their parents regularly too. It makes us immensely happy.”*

Trainers report that students who are self-motivated are eagerly waiting for opportunities where they can present their skills. They share students who have started to ask questions, seek clarifications, receive feedback and also engage in teaching their peers. Trainers observe children are enthusiastic about learning English due to the activity-based pedagogy they use. They report children enjoy learning in SiV classes. Trainers mention that students' interest in learning motivates them to devise new strategies and engage children in learning meaningfully. Trainers stress that their primary aim is to see if children are able to grasp concepts rather than abruptly completing the syllabus. They point out that they are gradually trying to incorporate technology in classrooms and are working towards creating an inclusive classroom.

A trainer shares her experience and says-

*“Students trust us immensely. I had taken my students to DET. They had to interact with everyone. They got a good opportunity that day. They felt so proud that day and told me they feel they have achieved something. These opportunities give them a reason to learn new skills.”*

Further trainers discuss the challenges faced by them in delivering the program. They share that school support is necessary to deliver the SiV program effectively. In the initial years few schools were hesitant about the positioning of the program in their regular working day. They were concerned about aspects of allocation of time, space and its effect on children and community. In this backdrop trainers report the beginning years of implementing the SiV program in schools was challenging as gaining the trust from the community, school, parents and students is necessary and usually a time taking process. Trainers mention that cluster heads were supportive in addressing challenges they faced at the field level and were extremely supportive in the initial years of the program implementation. Along with cluster heads, in a few instances school teachers encouraged and supported the program implementation by requesting parents to join their children to the SiV program. Another challenge that was reported is about low attendance rate in the regular parent trainer meetings. Parents availability in school timings is difficult as they are employed in agricultural activities. Hence trainers make an effort to visit their students' homes to convey about the progress. Another challenge is the lack of age-appropriate reading, writing and learning skills among students. This leads trainers to customize the content for each student in their class. It is reported that in a few schools conducting co-education classes was not permitted. Hence the trainers engaged boys and girls separately and worked twice the normal hours conducting classes. Further to understand other stakeholders' experiences and views parents and district officials were approached. In the following section parents and district officials' perception on the program is presented.

#### **Parents and District Officials' Perception on Skill in Village Program**

Parents are one of the most important stakeholders in understanding the SiV program. In the initial stages, although they were hesitant to join their children in the SiV program, they now share that they witnessed a gradual and significant improvement in English communication of their children. A Parents shares,

*“Children share what they have learnt in classes every day. They are too excited to share what they have learnt. Children do speak among themselves in English. They correct us while we try to converse or read English.”.*

- Translated to English from Kannada

Parents share that the SiV trainers have had a positive impact on children. They enrolled their children in the program as they believe it will give children skills to pursue higher education and seek better job opportunities. Parents point out that the trainers conduct regular home visits to discuss their child's progress and that has helped them to get a better understanding of their child's involvement in the program. They feel the trainers are sincere and constantly motivate children to learn new skills. A Parent shares -

*“Children also are more disciplined now since they have to wake up early to attend classes. They do not need any reminders. They are responsible and they never miss classes.”*

- Translated to English from Kannada

Parents are appreciative of the trainer's dedication and point out that to accommodate individual differences of children's' abilities, trainers modify teaching strategies. They create an atmosphere to accommodate the learning needs of all children. Along with it they share that the children feel excited to learn the content in engaging ways like role plays, skits, presentations etc. A parent shared -

*“There is something called Roleplay that children do. So, children write dialogues and converse, practice in English. They all assemble and practice role play in our home. They do ask us suggestions sometimes.”*

- *Translated to English from Kannada*

Parents have noticed their children are getting better at speaking in English along with reading, writing, and understanding English. They have found their child being more responsible and disciplined. They report significant improvement in reading, understanding, speaking and writing English. A parent recalls

*“Children confidently converse in English. Initially they were unable to write a single word in English, whereas now they speak in English much faster and fluently than us.”*

- *Translated to English from  
Kannada*

Similar observations to that of trainers and parents were made by District Officials. The District Officials have appreciated Deshpande Foundation’s dedication towards delivering skill development programs in rural parts of Karnataka and Telangana. They reported that they have been cooperating and extending support to implement the SiV program in schools and express that they will continue to extend the support in the future. They report that they have visited schools and have spoken to parents to understand their perception of the program. They report that both parents and students have shared with them the program is giving them opportunities to learn English communication skills. District officials share that in their visits they have observed students are able to converse in English and communicate with confidence. Officials report that they have observed trainers using roleplay, skits, debates as a medium to engage children in learning English and they believe that it has contributed to improving communication skills among children. A District Official shares-

*“DF with their work has created a good learning environment for students to learn English.”*

- *Translated to English from Kannada*

Officials share that creating an environment to learn English in schools is a tough task as not all parents are receptive to new initiatives. They identify the lack of infrastructure in schools, small classrooms can be a challenge to implement the program. In this context District officials appreciate SiV trainers' work in the schools and thank them for their dedication towards delivering the program in spite of challenges at field level. They also believe in the coming years the program could be scaled up to elementary grades and secondary grade students. They are hopeful to see the geographical expansion of the program to more districts in rural areas of Telangana and Karnataka.

## **Conclusion**

The stakeholders have a positive perception on SiV intervention and claim that it has impacted their English language learning and life skills. Students claim that the activity-based pedagogy has made learning enjoyable. Trainers believe the program has significantly impacted students’ ability to communicate in English and to express confidently. The parents have developed trust in the trainers and appreciate their contribution to their community. District officials believe the scaling up of the SiV program to different grades and geographically can impact more students and improve the access to opportunities to pursue a better future.

## **5.2 Quantitative Analysis**

### **Proficiency Description**

Tables 7 and 8 below give the description for each proficiency level the students have been categorized into based on their scores achieved.

**Table 7. English Proficiency level descriptions for grade 7 & 8**

<b>PROFICIENCY LEVEL DESCRIPTIONS ENGLISH: GRADE 7 AND 8</b>	
<b>ADVANCE (&gt;439)</b>	<ul style="list-style-type: none"> <li>● Students integrate their understanding of sentences in a text to derive implicit relationships thereby interpreting and reflecting on unstated information.</li> <li>● They identify and construct grammatically correct complex sentences (with multiple parts).</li> <li>● They understand subject-verb agreement, noun-pronoun antecedent and use of adverbs and adjectives in sentences.</li> <li>● They can read stories, tables, or texts (12-16 lines), with some unfamiliar elements.</li> <li>● They retrieve information and use contextual clues to derive meaning of unfamiliar words.</li> <li>● They link content with their existing knowledge to interpret, reflect and infer sequence of events, purpose of text, emotions or nature of characters, cause-effect, etc. that are implicit in the text.</li> </ul>
<b>INTERMEDIATE (400-439)</b>	<ul style="list-style-type: none"> <li>● Students understand the explicit relationship between words in a sentence, sentences in a para and retrieve directly stated information.</li> <li>● They recognise all parts of speech in a sentence.</li> <li>● They develop vocabulary by understanding the contextual usage of words.</li> <li>● They identify grammatically correct sentences.</li> <li>● They can read stories or texts (8-12 lines) about familiar situations, information presented in tables, and retrieve directly stated information.</li> </ul>
<b>BASIC (360-399)</b>	<ul style="list-style-type: none"> <li>● Students read language units (like words, or sentences) in a disparate manner and understand directly stated information.</li> <li>● They recognise complete sentences and differentiate between phrases and sentences.</li> <li>● They recognise and learn new words and use them in their writing.</li> <li>● They recognise parts of a sentence correctly.</li> <li>● They use parts of speech meaningfully.</li> <li>● They read short texts and retrieve stated information.</li> </ul>
<b>BEGINNER (&lt;360)</b>	Students at this level demonstrate proficiency that is below the basic minimum proficiency at Class 7 & 8



**Table 8. English Proficiency level descriptions for Grade 9 & 10**

<b>PROFICIENCY LEVEL DESCRIPTIONS ENGLISH: GRADE 9 AND 10</b>	
<b>ADVANCE (&gt;464)</b>	<ul style="list-style-type: none"> <li>● Students integrate their understanding of sentences in a text to derive implicit relationships thereby interpreting and reflecting on unstated information.</li> <li>● They are able to use advanced grammatical forms such as subordinate, correlative and coordinating conjunctions.</li> <li>● They learn and understand subject-verb concord in sentences. They identify and construct different types of sentences.</li> <li>● They read familiar and unfamiliar texts of 15-20 sentences and connect content with their existing knowledge to infer the main idea and purpose of text, emotions or nature of characters, cause-effect, etc. that are not explicitly stated.</li> <li>● They comprehend text in-depth enough to paraphrase or summarise the key point of texts they read.</li> </ul>
<b>INTERMEDIATE (425-464)</b>	<ul style="list-style-type: none"> <li>● Students understand the explicit relationship between words in a sentence, sentences in a para and retrieve directly stated information.</li> <li>● They understand the usage of conjunctions to form complex and compound sentences.</li> <li>● They use adverbs, types of adverbs, adjectives and different types of adjectives in sentences.</li> <li>● They are able to break down a word into its root word and prefix or suffix.</li> <li>● They read familiar and unfamiliar texts of 12-15 sentences and are able to comprehend the stated information.</li> </ul>
<b>BASIC (385-424)</b>	<ul style="list-style-type: none"> <li>● Students read language units (like words, or sentences) in a disparate manner and understand directly stated information.</li> <li>● Students understand simple sentence structure and identify parts of speech in sentences.</li> <li>● They read familiar texts of 10-12 lines and retrieve directly stated information.</li> <li>● They can identify words with similar meanings through their context use in the text.</li> </ul>
<b>BEGINNER (&lt;385)</b>	Students at this level demonstrate proficiency that is below the basic minimum proficiency at Class 9 and 10.

### English

This section presents the performance of students in English Language skills which has been measured on the CGI scale. The students were analysed across grades 7,8,9, and 10 and across SiV and Non-SiV groups.

### T-Test

Grade-wise T-test was used to understand the difference in mean sample between SiV and Non-SiV groups across Karnataka and Telangana.

**Table 9. Corresponding p values**

Grade	Average Scale Score		p-value
	SiV	Non-SiV	
7	362	351	0.01
8	385	381	0.17
9	376	367	0.00
10	393	381	0.00

The above table shows the average scale scores values and P values obtained from the T-Test. The P-value for Grade 7, 9 and 10 is less than 0.05 ( $p < 0.05$ ). Therefore, we conclude that the difference observed between SiV and Non-SiV students in grade 7, 9 and grade 10 is statistically significant. However, the p value for grade 8 is greater than 0.05 ( $p > 0.05$ ), therefore we conclude that there is no significant difference in mean values of SiV and Non-SiV students in grade 8.

**Table 10. Average of English and ACT scores achieved against years of SiV intervention**

Years of SiV intervention	Average of English Scale Scores
0	352
1	374
2	386
3	396

From the above table, we see that the average scores in both English and ACT subjects are increasing with the number of increasing years of SiV intervention.

#### **5.1.1.2 CORRELATION**

Correlation Variables	Correlation Coefficient
Years of SiV intervention & English Scores	0.23
Online Classes & English Scores	0.18
English & ACT	0.56

#### **Correlation interpretation**

From the above results, we can note a positive relation between the variables. However, the correlation coefficient for all the variables analysed are not strong enough. While, between English and ACT scores, it was noted that the relationship is fairly moderate and positive. Thus, indicating that with an increase in scores of English and ACT scores also tend to increase.

#### **Performance based on scale scores and proficiency levels**

Below are the results of student performance based on the scale scores achieved. On the basis of the scale scores achieved by students, the proficiency level of each student is determined based on predefined categories, namely, Beginner, Basic, Intermediate and Advanced. The student scores were analyzed across grades and SiV/Non-SiV groups while proficiency levels were identified across SiV and Non-SiV groups.

**Figure 12. Proficiency Distribution of students across Grades**

## SiV GROUP

## ENGLISH

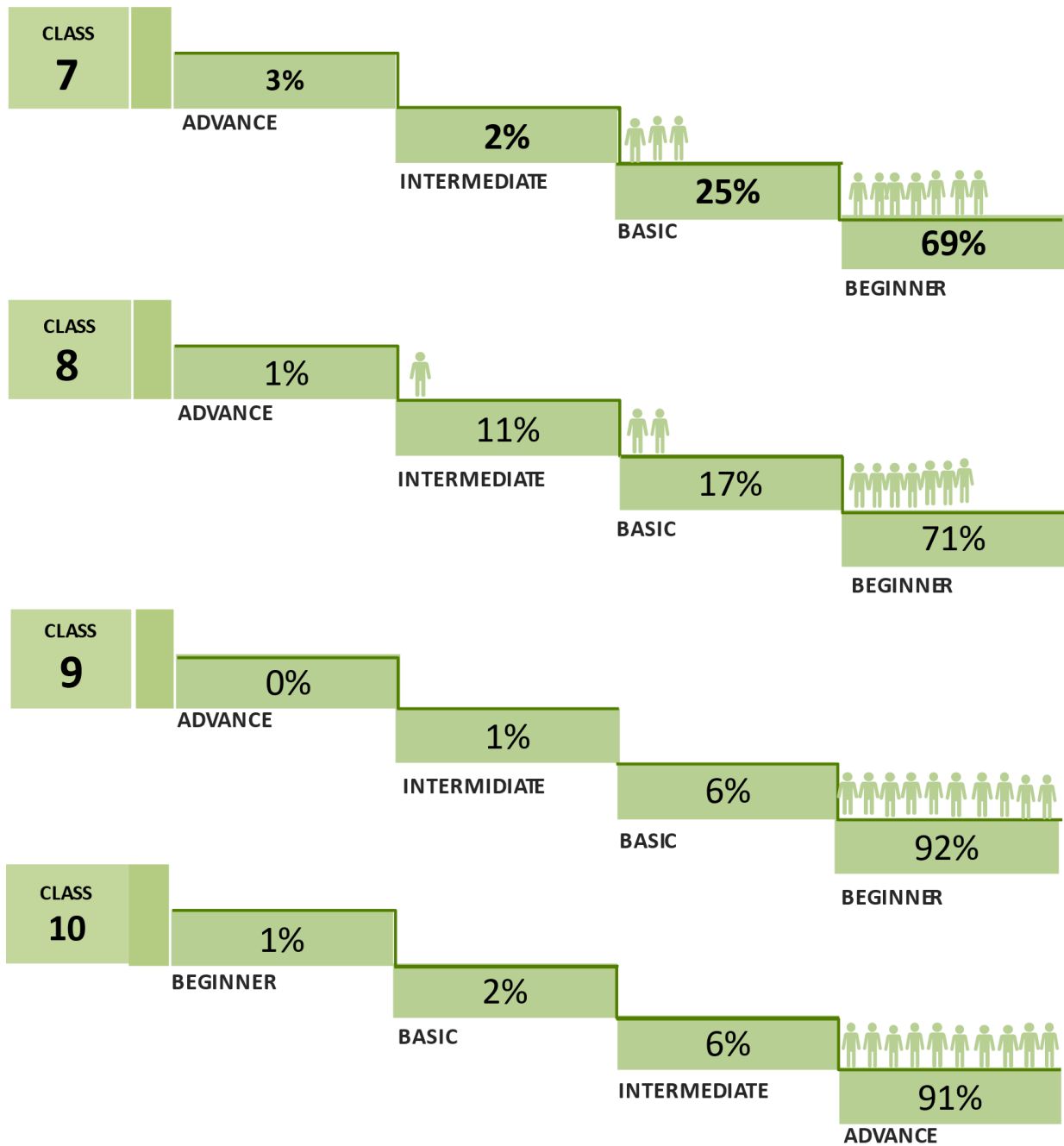


Figure 12 represents the overall proficiency level of students across grades 7,8,9,10. The distribution of students of all the grades can be seen mostly in the beginner category. Among the students across grades, students from grades 7 and 8 are performing better than students from grades 9 and 10.

**Figure 13. Overall scores and Proficiency Distribution of Boys and Girls**

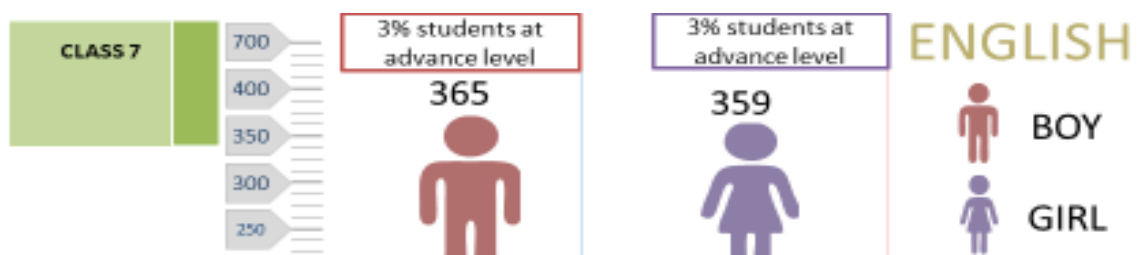


Figure 13 gives the Grade-wise proficiency distribution and average score among boys and girls. It shows that there is no significant gap in learning between these gender groups. Most of the students fall in the beginner level of proficiency.

**Figure 14. Student performances in English across grades and groups**

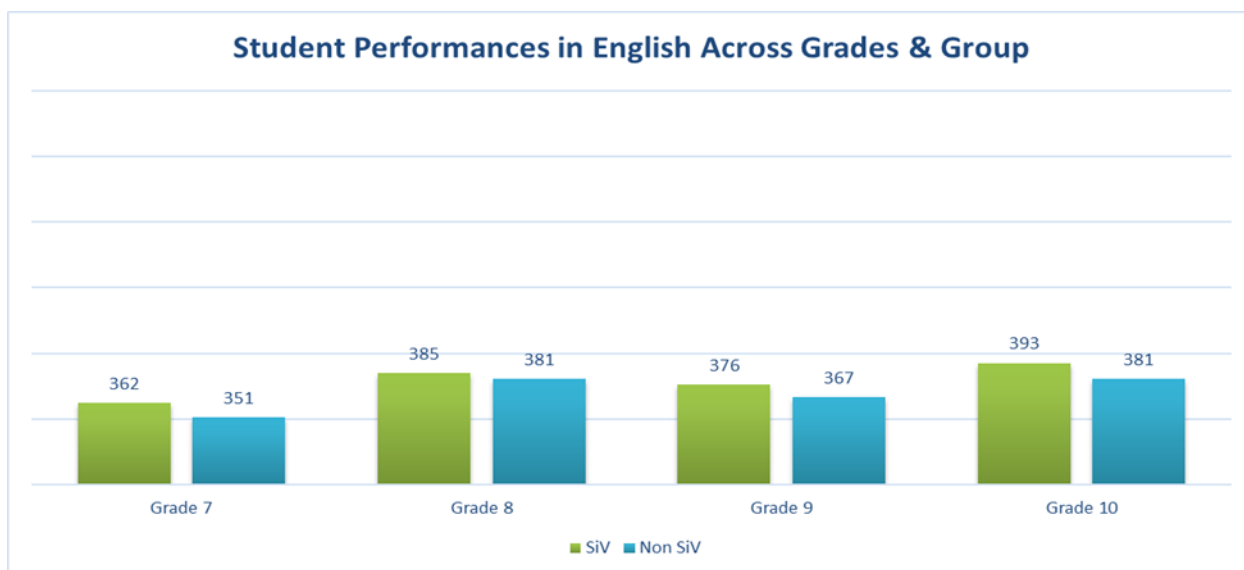
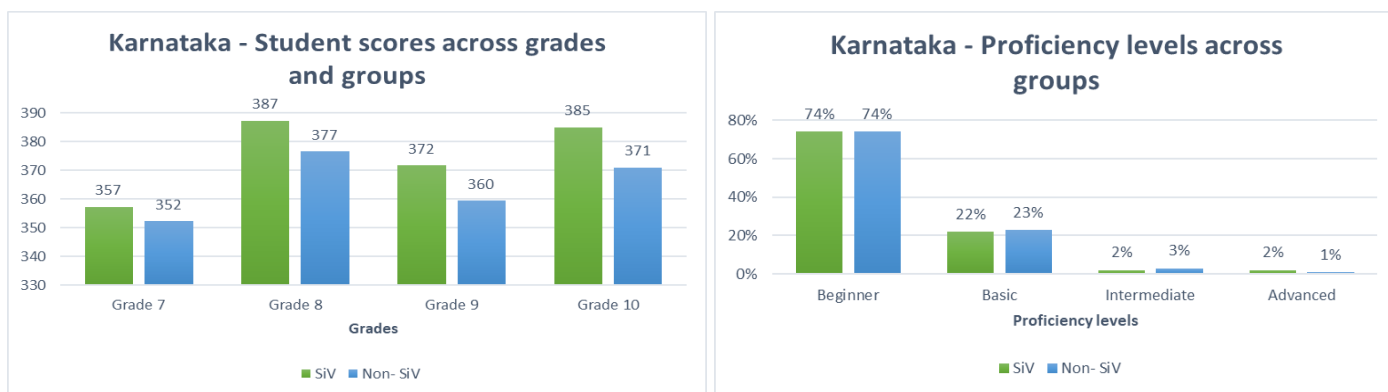


Figure 14 shows the average scores of students scored in English. The performance of students was higher among SiV students than Non-SiV students across all the grades.

**State-Level performance in English**

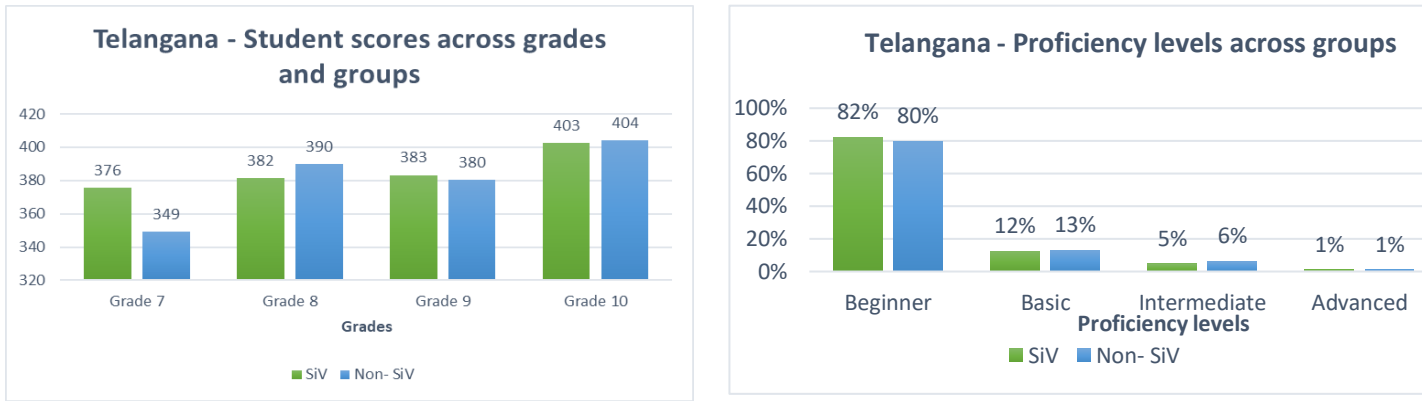
This section gives a state-level analysis of student performance across grades and SiV and Non SiV groups in Karnataka and Telangana.

**Figure 15. Average Student Scores across grades and groups in Karnataka**



In the Hubli sandbox in Karnataka, the average scale score achieved by SiV students across all the grades assessed were noted to be higher than Non-SiV students. From figure 5 and 6 it was noted that while the proficiency level of students indicated that 74% SiV students and Non-SiV students fall in the Beginner level category. 2% of SiV students have attained advanced level of proficiency against 0% of Non-SiV students.

**Figure 16. Average student scores and proficiency across grades and groups in Telangana**



In the Kakatiya sandbox in Telangana, SiV students are performing better than Non-SiV students in Grade 7 and 9. While, there is not a significant difference between SiV and Non-SiV students within proficiency level categories, most of the students, both SiV and Non SiV fall in the beginner level category.

**Cluster - wise performance of students in English**

**Figure 17. Average scores of SiV and Non SiV students across clusters in Karnataka and Telangana**

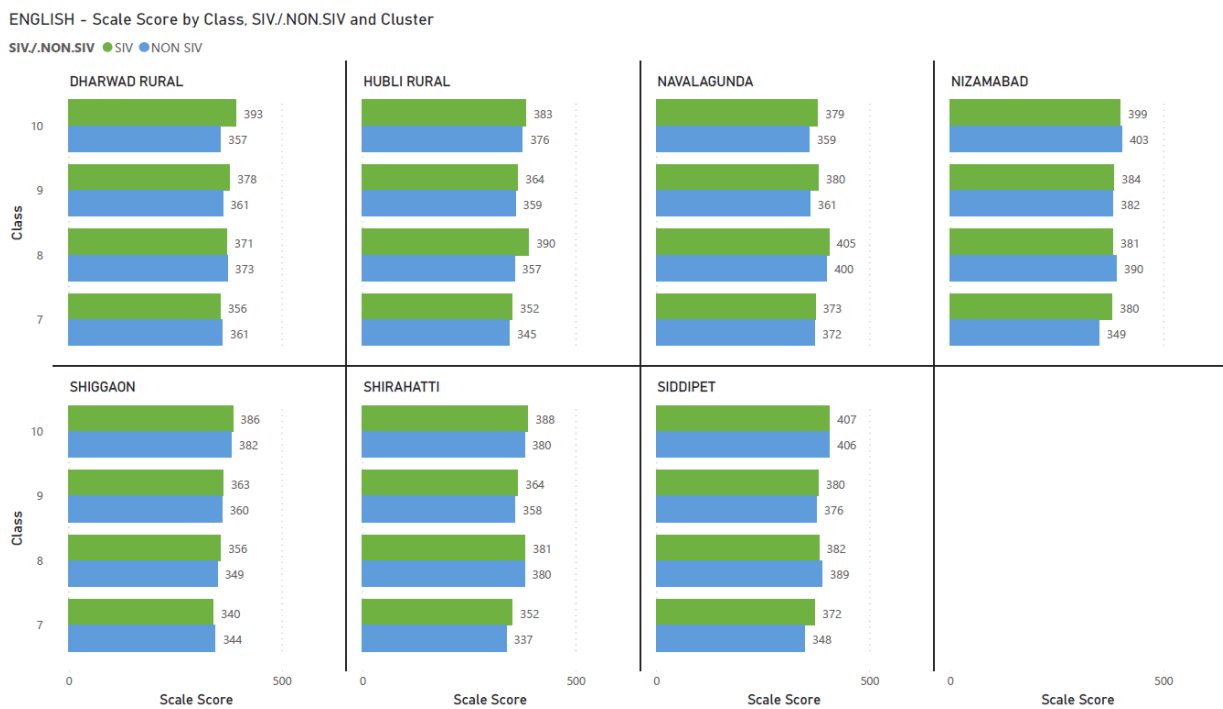


Figure 17 represents the cluster-wise performance of SiV and Non SiV students across all the grades. In the Hubli sandbox clusters, we see that Grade 9 and grade 10 SiV students are performing better than Non-SiV students. In Hubli, Navalagunda and Shirahatti, SiV students are performing better than Non SiV students across all grades. While in Dharwad and Shiggaon the average score achieved by students in grade 7 is higher for Non-SiV students. In Kakatiya sandbox, Grade 7 and Grade 9 SiV students are performing better than Non-SiV students.

**Question-level performance**

This section shows the performance of students at question level in each grade.

### Color scheme description

Criteria	Color
	Percentage correct > 80%
	Percentage correct is between 60% - 80%
	Percentage correct < 60%

The percentage correct against each question has been categorised into three color schemes.

**Table 12. Question-level performance of students in Grade 7 and 8**

ENGLISH GRADE - 7 and 8			
STRAND	QUESTION DESCRIPTION	% CORRECT	% CORRECT
Contextual Language Use	Match the word to the correct category	73%	82%
	Complete a word to identify the given part of the body	67%	67%
	Identify the word that rhymes with the given word	62%	66%
	Identify the odd word	59%	66%
	Match a given picture to the appropriate descriptive phrase	53%	63%
	Identify the correct form of group pronoun to complete the sentence	51%	59%
	Identify the correct form of 'is' to complete the sentence	47%	57%
	Choose the correct question word to complete the sentence	46%	56%
	Identify the grammatically correct sentence	43%	50%
	Identify the sentence that uses the appropriate preposition to match the picture	42%	46%
	Identify the word used to describe a particular animal sound	35%	44%
	Complete the sentence with appropriate quantity word	34%	44%
	Identify an appropriate emotion word for a situation shown in the picture	27%	36%
	Complete a sentence using 'buy' in the correct tense	24%	35%
	Identify the correct time preposition to complete the sentence	22%	22%
	Identify the correct word from a pair of homophones to complete the sentence	18%	13%
Read a 10-12 line descriptive text and identify opposite of an unfamiliar word	6%	13%	
Literal Reading	Identify object starting with letter S	79%	86%
	Match the word to the correct picture	75%	84%
	Complete a word to match the given picture	70%	80%
	Re-arrange letters to form a meaningful word	40%	62%
	Read a 2 sentence event description and answer a 'where' question	40%	57%
	Read a simple poster and retrieve directly stated information from competing options	40%	56%
	Read 5-8 line story and retrieve directly stated information from beginning of the story	40%	54%
	Read 5-8 line story and retrieve directly stated information from middle of the story	39%	53%
	Read a set of instructions and retrieve directly stated information at the beginning	39%	52%
	Read a set of instructions and retrieve information stated differently at the beginning	34%	47%

	Read a set of instructions and retrieve information stated differently at the end	34%	42%
	Read a 10-12 line descriptive text and retrieve directly stated information from competing options	28%	40%
	Read a 10-12 line descriptive text and retrieve directly stated information from end of para 1	26%	33%
<b>Critical Reading</b>	Read a 2 line text and infer the meaning of an unfamiliar word	37%	51%
	Read a simple poster and infer the meaning of an unfamiliar word	33%	45%
	Read 5-8 line story and identify the event that happens first	31%	38%
	Read 5-8 line story and identify the cause of an event	31%	37%
	Read a set of instructions and identify an action that comes chronologically after a given action	25%	36%
	Read a 10-12 line descriptive text and identify an attribute of the character	23%	36%
	Read a 10-12 line descriptive text and infer from differently stated information	22%	27%

**Table 13. Question-level performance of students in Grade 9 and 10**

<b>ENGLISH GRADE - 9 and 10</b>			
<b>STRAND</b>	<b>QUESTION DESCRIPTION</b>	<b>% CORRECT</b>	<b>% CORRECT</b>
<b>Contextual Language Use</b>	Match the word to the correct category	72%	73%
	Identify the correct gender and personal pronoun to complete the sentence	67%	83%
	Identify the odd word	57%	42%
	Identify the correct form of action word to complete the sentence	51%	34%
	Identify the correct form of group pronoun to complete the sentence	48%	31%
	Identify the correct form of 'is' to complete the sentence	45%	21%
	Identify and use the comparative form of the adjective	40%	19%
	Identify the sentence that uses the correct conjunction	38%	32%
	Identify the correct place preposition and complete the sentence	37%	62%
	Complete a sentence using the correct pair of gender pronouns	34%	37%
	Use the correct quantity word to complete the sentence	33%	27%
	Complete the sentence using the appropriate tense of a word	32%	50%
	Identify the correct time preposition to complete the sentence	27%	65%
	Match an adjective to a familiar setting shown in the picture	27%	63%
	Identify the correct word from a pair of homophones to complete the sentence	23%	23%
	Complete the sentence using the appropriate relative pronoun	23%	31%
	Complete the sentence using the correct preposition	20%	59%
	Identify the sentence that using an appropriate conjunction	16%	49%
	Read a 8 line poem and identify a pair of rhyming words used in the poem	12%	26%
<b>Literal Reading</b>	Complete a word to match the given picture	86%	90%



	Re-arrange letters to form a meaningful word	84%	88%
	Read a 2 line information text and answer a 'where' question	50%	55%
	Read an animal fact sheet and retrieve directly stated information	47%	53%
	Read a 10-12 line factual text and retrieve directly stated information from the beginning	43%	45%
<b>Critical Reading</b>	Read a 2 line information text and infer from information stated differently	54%	69%
	Read a 2 line information text and infer the meaning of an unfamiliar word	52%	65%
	Read an animal fact sheet and identify a false statement	51%	51%
	Read a 8 line poem and infer from differently stated information	40%	50%
	Read a 8 line poem and classify the type of text	33%	49%
	Read a 10-12 line story and infer from differently stated information	33%	42%
	Read a 10-12 line story and identify attribute that the character does not have	33%	39%
	Read a 10-12 line story and identify an event/action that happens first	31%	34%
	Read a 10-12 line story and identify an event/action that happens last	30%	34%
	Read a 10-12 line story and identify who a description refers to	26%	33%
	Read a 10-12 line factual text and match a pair of synonyms	22%	29%
	Read a 10-12 line factual text and identify a false statement	20%	26%
	Read a 10-12 line factual text and choose an alternative title	16%	23%
	Read a 10-12 line factual text and infer the intent of the author	16%	13%

## Conclusion (English)

On a concluding note, across grades, it is noted that SiV students' performances are better in English as compared to Non-SiV students in grade 7, 9 and 10.

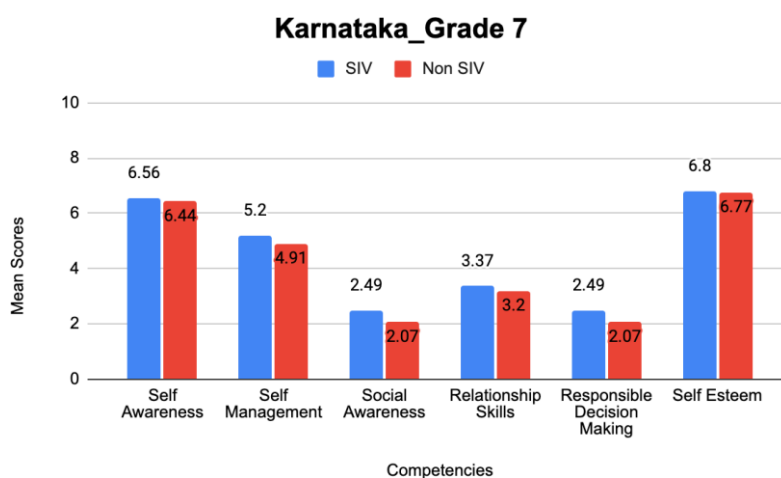
- In grade 7, Only 5% of the students achieved grade level Competency. In English 69% of the students are in Beginner and 25% in Basic proficiency level, while 2% are at intermediate and 3% advanced proficiency level. Students require continuous remediation to acquire grade level competencies. While the difference is not so significant, boys have performed better than girls.
- In grade 8, only 4% of the students achieved grade level Competency. In English 88% of the students are in Beginner and Basic proficiency level, while 12% are at intermediate and advanced level. Students require continuous remediation to acquire grade level competencies. Girls have performed better than boys.
- In grade 9, 98% of the students are in Beginner and Basic proficiency level, while 2% are at intermediate and advanced proficiency level. Students require rigorous remediation to acquire grade level competency. The performance of both boys and girls are at below grade levels.
- In grade 10, 97% of the students are in Beginner and Basic proficiency level, while 3% are at intermediate and advanced proficiency level. Only 2% of students are at grade level. Girls have performed better than boys.

## Life Skills Data Analysis: State Level Life Skills Data Analysis

### Karnataka Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Karnataka were assessed using a self-reported questionnaire. 77 students of the intervention group (SiV Students) and 175 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making and self-esteem. Change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

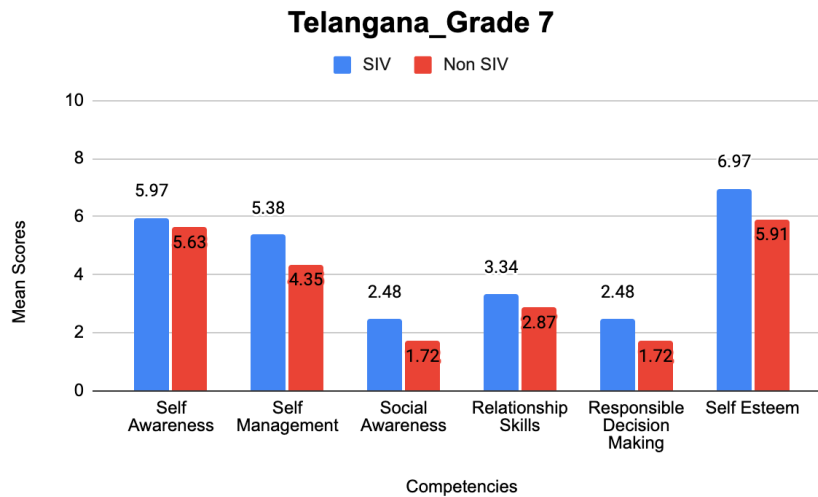
Figure 18: Grade 7 - Karnataka - Mean Scores of Interventions and Comparison group



### Telangana Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Telangana were assessed using a self-reported questionnaire. 29 students of the intervention group (SiV Students) and 93 students of comparison group (non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-awareness, social awareness, and responsible decision-making scores in comparison to those in the comparison group. This demonstrates the change in self-awareness, social awareness and responsible decision-making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making and self-esteem. The changes in self-awareness, social awareness & responsible decision making are attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

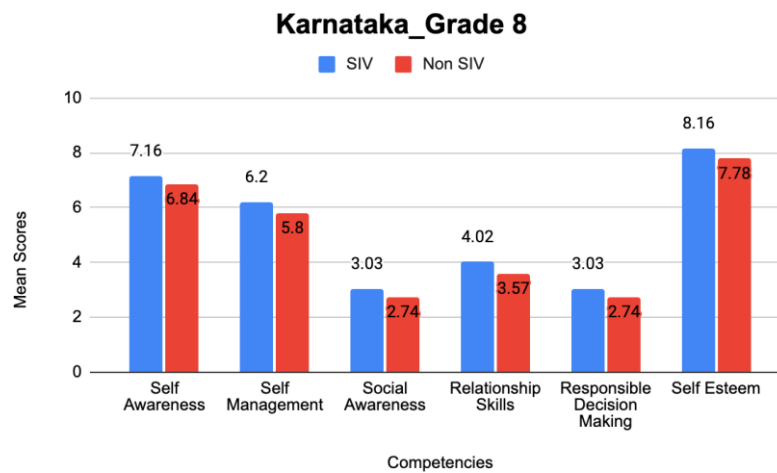
**Figure 19: Grade 7 - Telangana - Mean Scores of Interventions and Comparison group**



**Karnataka Grade 8**

To investigate the impact of the *Skill in Village* program, grade 8 students of Karnataka were assessed using a self-reported questionnaire. 183 students of the intervention group (SiV Students) and 175 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making & self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

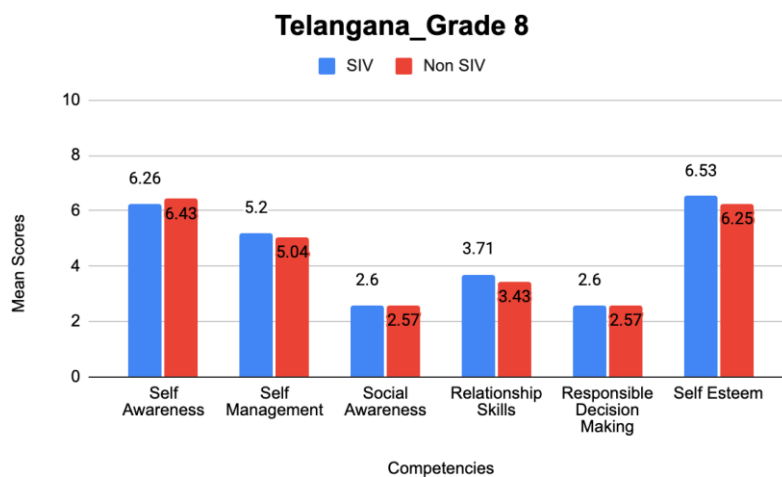
**Figure 20: Grade 8 - Karnataka - Mean Scores of Interventions and Comparison group**



## Telangana Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Telangana were assessed using a self-reported questionnaire. 113 students of the intervention group (SiV Students) and 93 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in relationship skills, responsible decision making and self-esteem. However, the change in the competency is due to chance factors and not necessarily an outcome of the intervention.

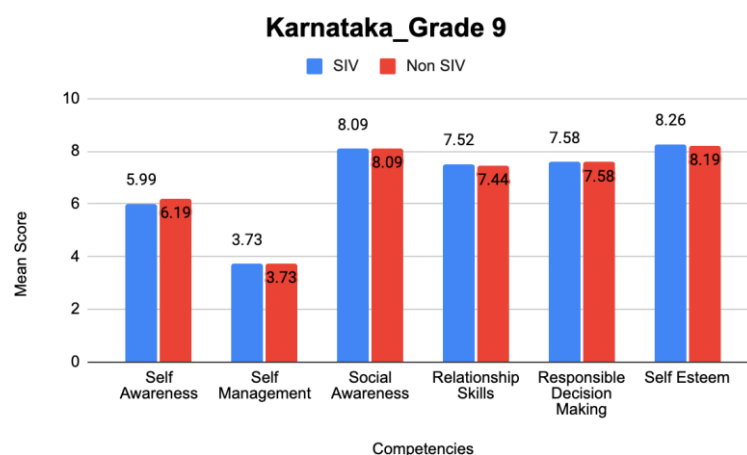
Figure 21: Grade 8 - Telangana - Mean Scores of Interventions and Comparison group



## Karnataka Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Karnataka were assessed using a self-reported questionnaire. 169 students of the intervention group (SiV Students) and 188 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A mean difference is observed in relationship skills and self-esteem. Change in these competencies is due to chance factors and not necessarily an outcome of the intervention.

Figure 22: Grade 9 - Karnataka - Mean Scores of Interventions and Comparison group

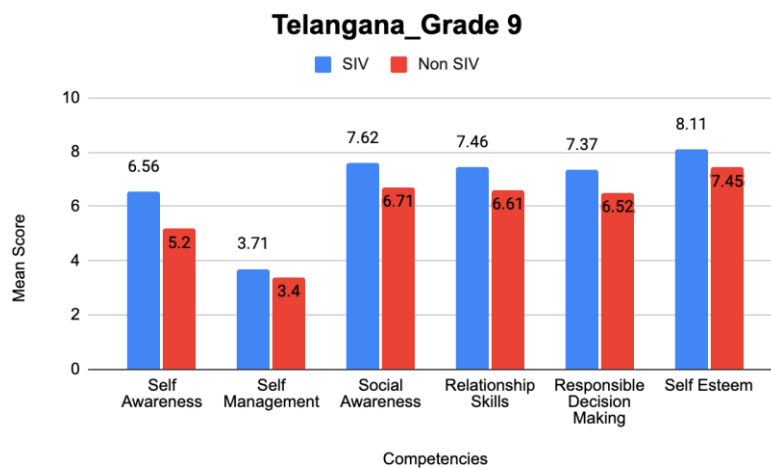


## Telangana Grade 9

To investigate the impact of the *Skill in Village* program, grade 10 students of Telangana were assessed

using a self-reported questionnaire. 115 students of the intervention group (SiV Students) and 95 students of comparison group (Non-SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management scores and relationship skills scores in comparison to those in the comparison group. This demonstrates the change in self-management and relationship skills levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills and responsible decision making. However only the change in self-management & relationship skills are attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

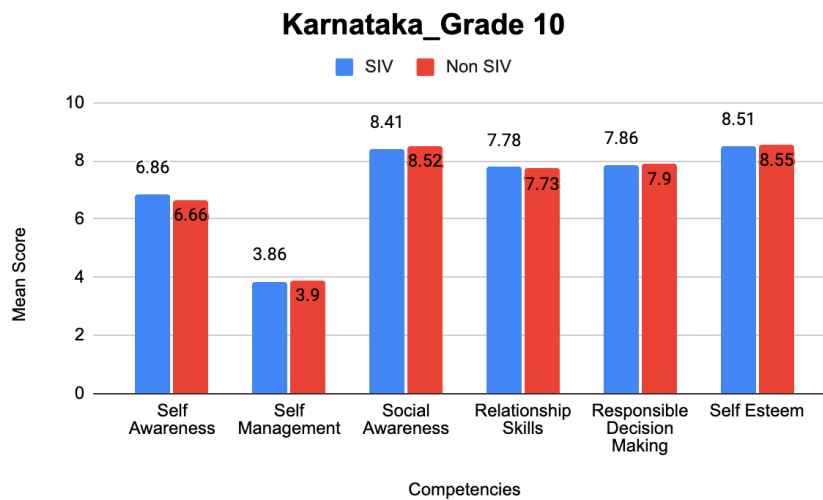
**Figure 23: Grade 9 - Telangana - Mean Scores of Interventions and Comparison group**



### Karnataka Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Karnataka were assessed using a self-reported questionnaire. 139 students of the intervention group (SiV Students) and 182 students of comparison group (Non-SiV) students were selected. Those in the intervention group demonstrated a significant increase in responsible decision making scores in comparison to those in the comparison group. This demonstrates the change in responsible decision making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-awareness relationship skills. However only the change in responsible decision making is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

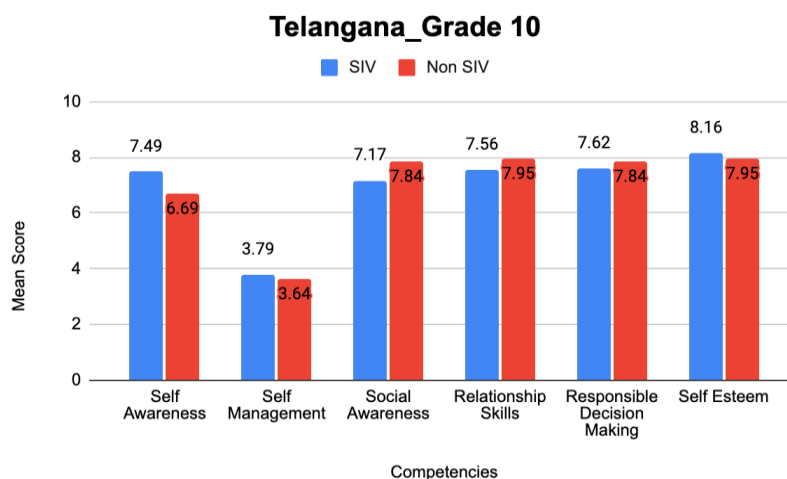
**Figure 24: Grade 10 - Karnataka - Mean Scores of Interventions and Comparison group**



### Telangana Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Telangana were assessed using a self-reported questionnaire. 106 students of the intervention group (SiV Students) and 76 students of comparison group (Non-SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management scores & self-esteem scores in comparison to those in the comparison group. This demonstrates the change in self-management and self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills & self-esteem. However only the change in self-management & self-esteem are attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 25: Grade 10 - Telangana - Mean Scores of Interventions and Comparison group**



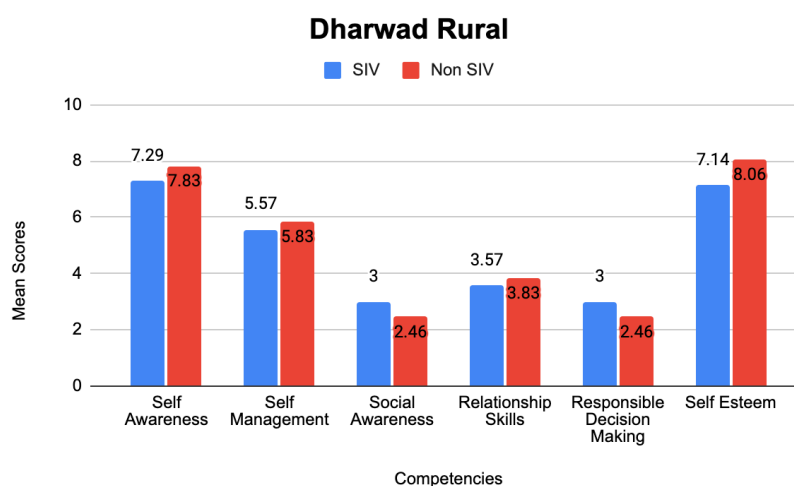
## Cluster Wise Life Skills Data Analysis

### Dharwad Rural

#### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Dharwad Rural were assessed using a self-reported questionnaire. 7 students of the intervention group (SiV Students) and 35 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in social awareness & responsible decision making. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 26: Grade 9 - Karnataka - Dharwad Rural- Mean Scores of Interventions and Comparison group**

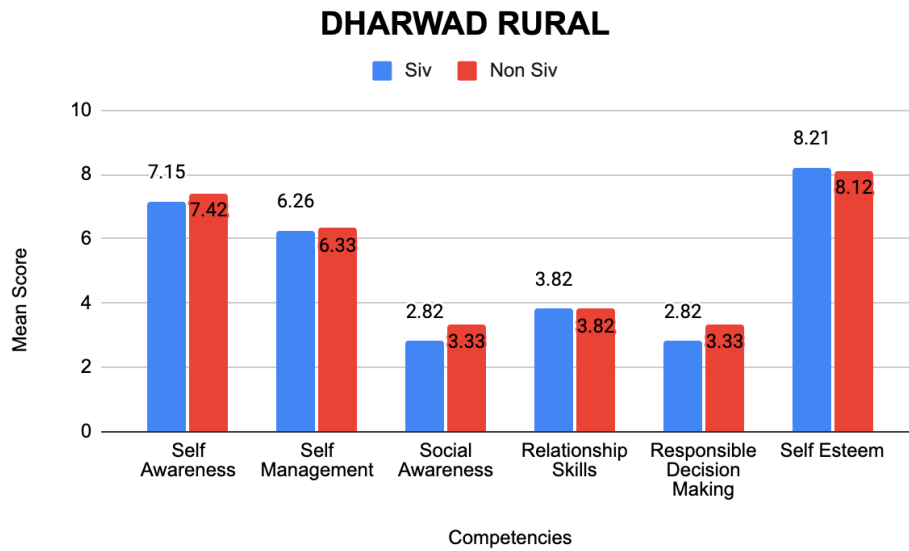


#### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Dharwad Rural were assessed using a self-reported questionnaire. 30 students of the intervention group (SiV Students) and 37 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.



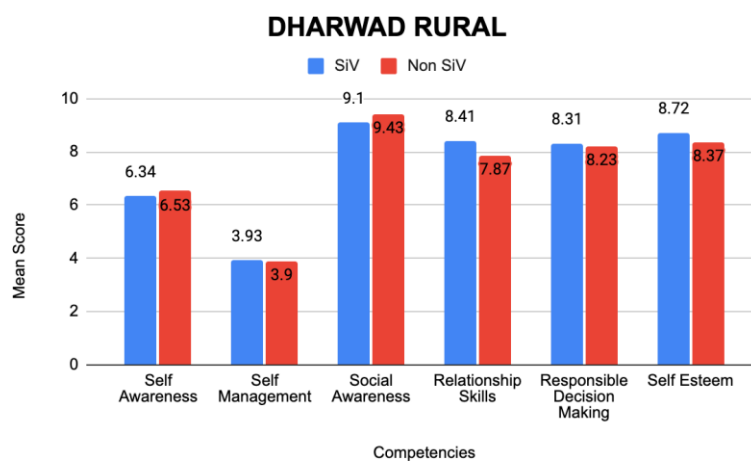
**Figure 27: Grade 8 - Karnataka - Dharwad Rural - Mean Scores of Interventions and Comparison group**



**Grade 9**

To investigate the impact of the *Skill in Village* program, grade 9 students of Dharwad rural were assessed using a self-reported questionnaire. 27 students of the intervention group (SiV Students) and 32 students of comparison group (Non-SiV) students were selected. Those in the intervention group demonstrated a significant increase in relationship skills & in self-esteem scores in comparison to those in the comparison group. This demonstrates the change in relationship skills & self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in relationship skills and responsible decision making & self-esteem. However only the change in relationship skills & self-esteem are attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

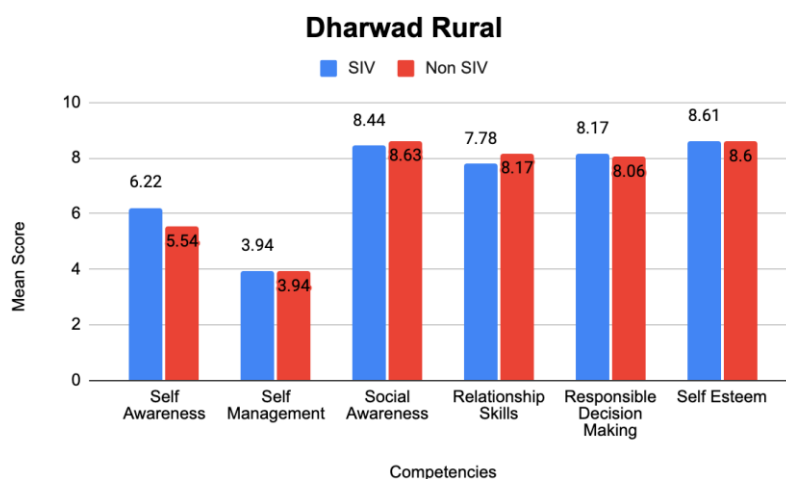
**Figure 28: Grade 9 - Karnataka - Dharwad Rural- Mean Scores of Interventions and Comparison group**



## Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Dharwad Rural were assessed using a self-reported questionnaire. 18 students of the intervention group (SiV Students) and 35 students of comparison group (Non-SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-awareness. The change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 29: Grade 10 - Karnataka - Dharwad Rural - Mean Scores of Intervention and Comparison group**

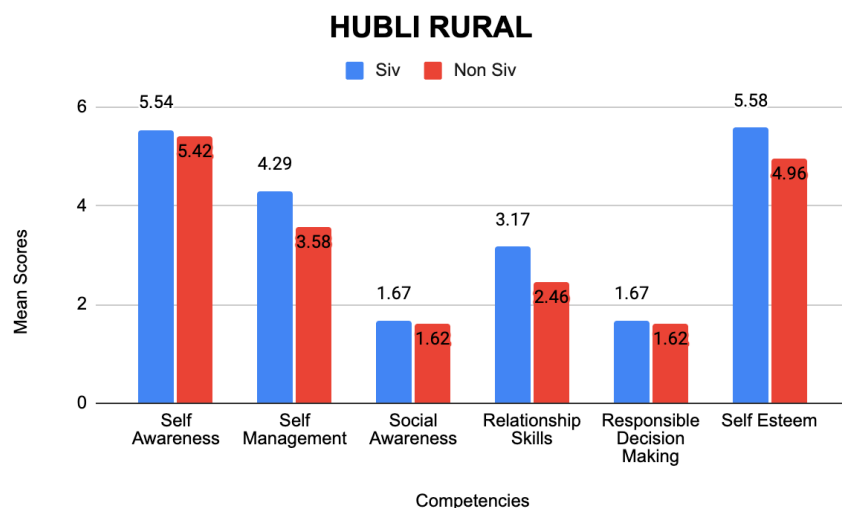


## Hubli Rural

### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Hubli rural were assessed using a self-reported questionnaire. 16 students of the intervention group (SiV Students) and 32 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-esteem scores in comparison to those in the comparison group. This demonstrates the change in self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making & self-esteem. However only the change in self-esteem is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

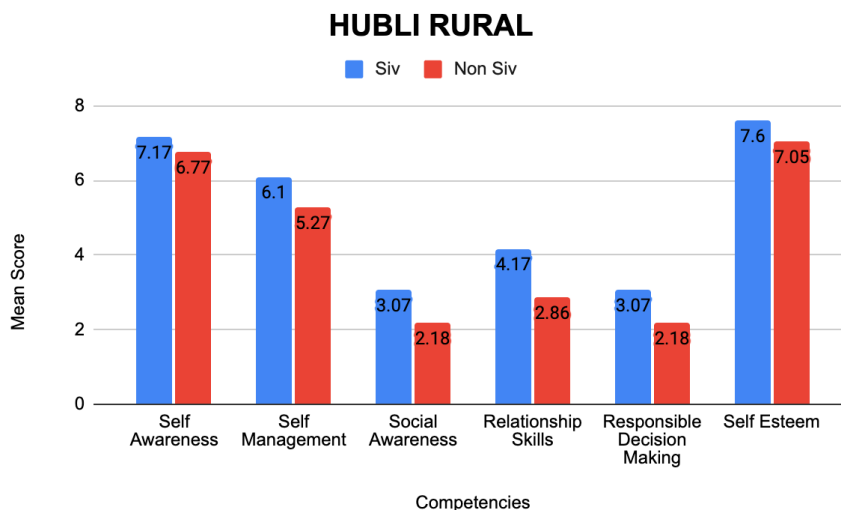
**Figure 30: Grade 9 - Karnataka - Hubli Rural- Mean Scores of Intervention and Comparison group**



**Grade 8**

To investigate the impact of the *Skill in Village* program, grade 8 students of Hubli Rural were assessed using a self-reported questionnaire. 28 students of the intervention group (SiV) and 24 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, self-esteem and responsible decision making. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

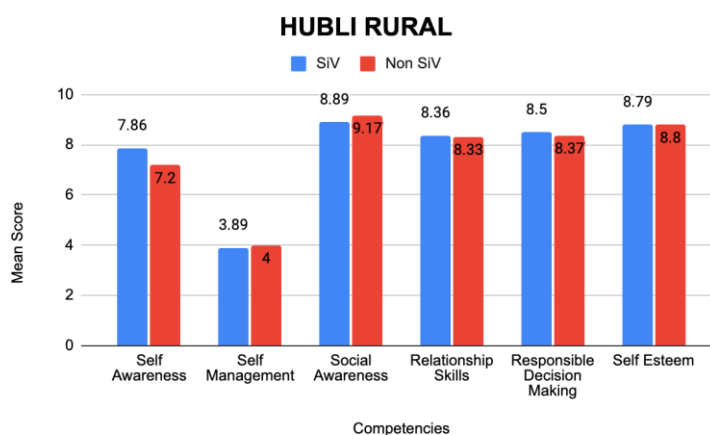
**Figure 31: Grade 8 - Karnataka - Hubli Rural - Mean Scores of Intervention and Comparison group**



## Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Hubli rural were assessed using a self-reported questionnaire. 26 students of the intervention group (SiV Students) and 30 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in responsible decision making in comparison to those in the comparison group. This demonstrates the change in responsible decision making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, relationship skills and responsible decision making. However only the change in responsible decision making is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

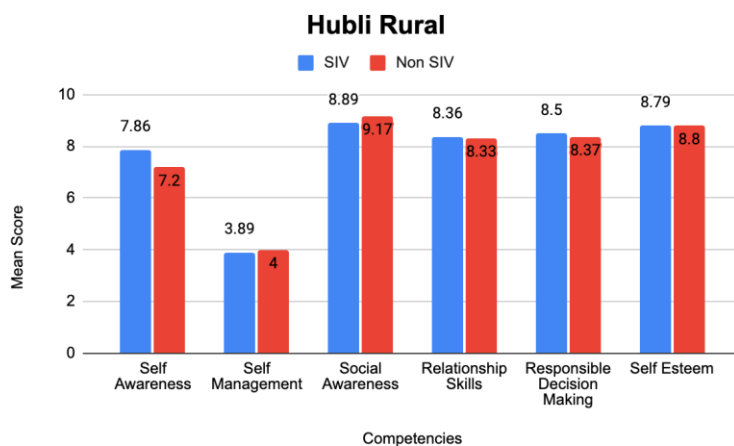
**Figure 32: Grade 9 - Karnataka - Hubli Rural- Mean Scores of Intervention and Comparison group**



## Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Hubli rural were assessed using a self-reported questionnaire. 27 students of the intervention group (SiV Students) and 31 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in responsible decision making scores in comparison to those in the comparison group. This demonstrates the change in responsible decision making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, relationship skills, & responsible decision making. However only the change in responsible decision making is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 32: Grade 10 - Karnataka - Hubli Rural - Mean Scores of Intervention and Comparison group**

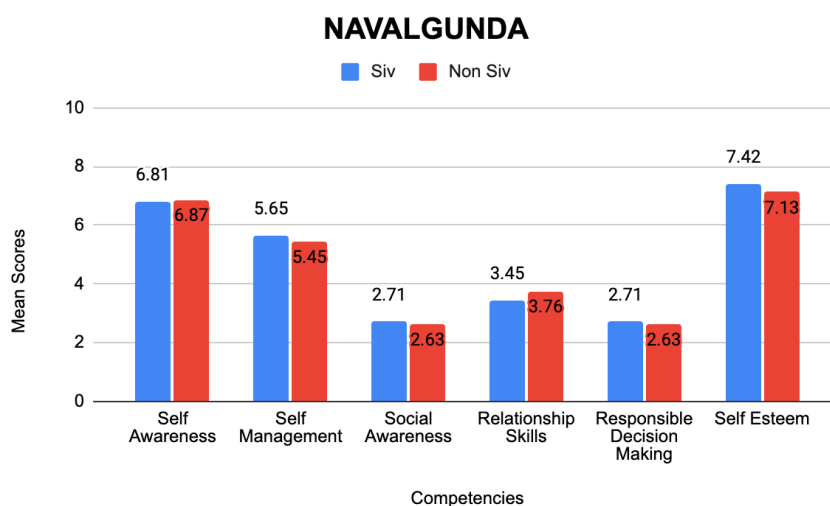


## Navalagunda

### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Navalagunda were assessed using a self-reported questionnaire. 31 students of the intervention group (SIV Students) and 38 students of comparison group (Non SIV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-management & self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

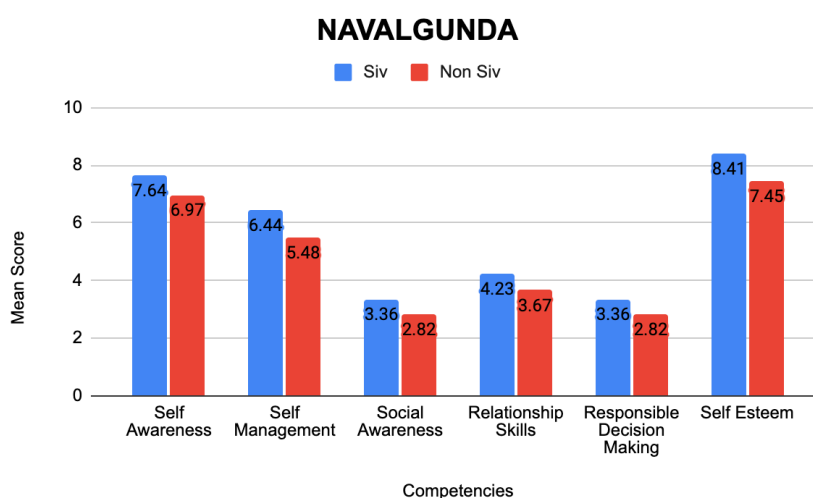
**Figure 33: Grade 7 - Karnataka – Navalagunda - Mean Scores of Intervention and Comparison group**



### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Navalagunda were assessed using a self-reported questionnaire. 61 students of the intervention group (SiV Students) and 36 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-awareness, self-management scores & relationship skills scores in comparison to those in the comparison group. This demonstrates the change in self-awareness, self-management & relationship skills levels of students in the intervention group are attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making & self-esteem. However only the change in self-awareness, self-management & relationship skills is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

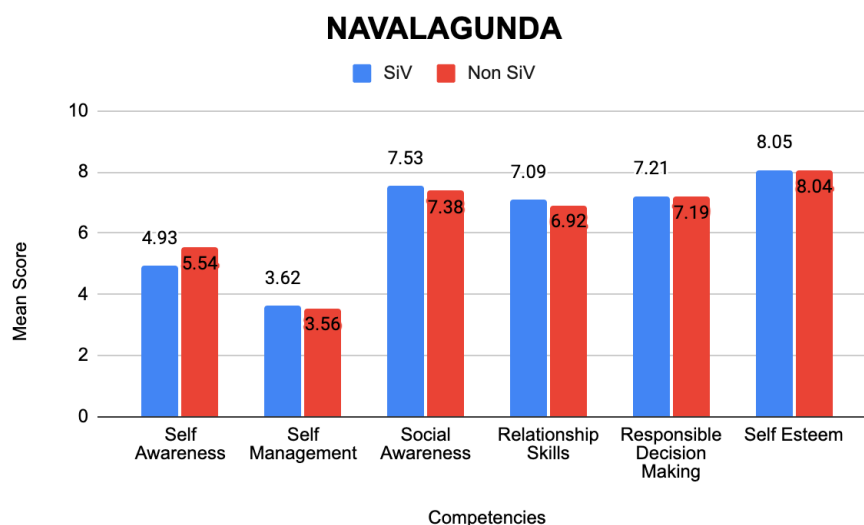
**Figure 34: Grade 8 - Karnataka - Navalagunda - Mean Scores of Intervention and Comparison group**



### Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Navalagunda were assessed using a self-reported questionnaire. 58 students of the intervention group (SiV Students) and 48 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-management, social awareness, relationship skills, responsible decision making and self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

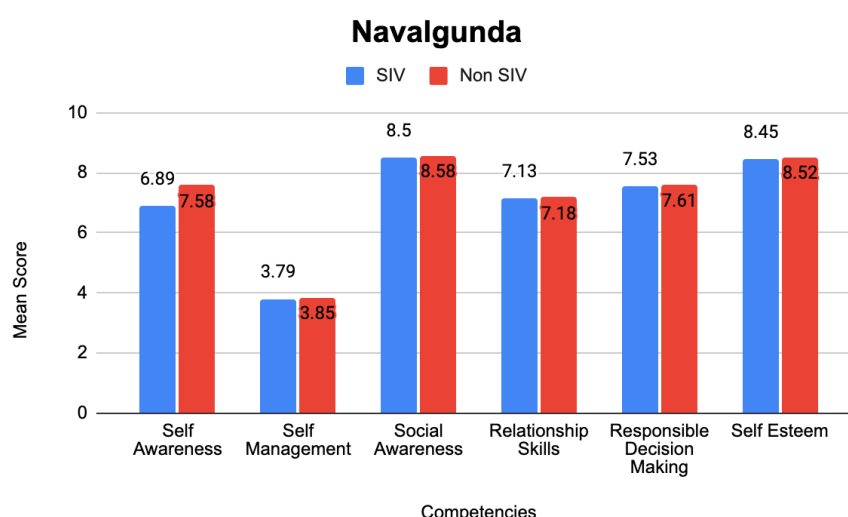
**Figure 35: Grade 9 - Karnataka -Navalagunda- Mean Scores of Interventions and Comparison group**



### Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Navalagunda were assessed using a self-reported questionnaire. 36 students of the intervention group (SiV Students) and 34 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 36: Grade 10 - Karnataka - Navalagunda - Mean Scores of Interventions and Comparison group**



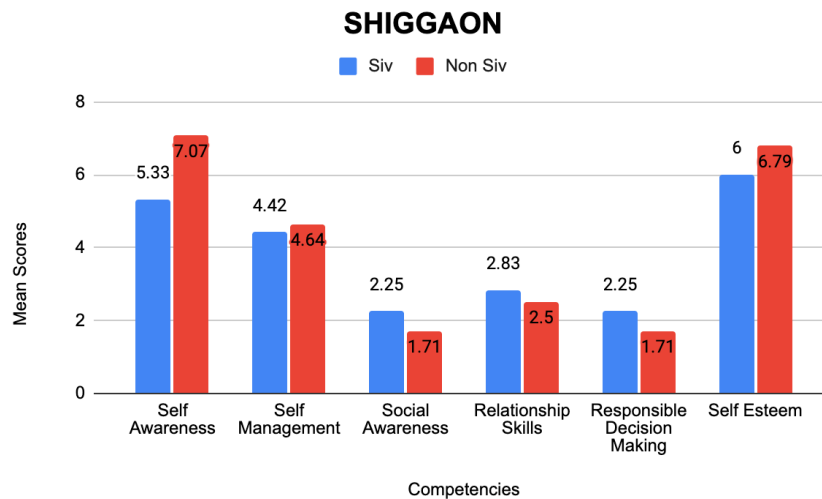
### Shiggaon

#### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Shiggaon were assessed using a self-reported questionnaire. 8 students of the intervention group (SiV Students) and 17

students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in social awareness, relationship skills, and responsible decision making. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 37: Grade 7 - Karnataka - Shiggaon- Mean Scores of Interventions and Comparison group**

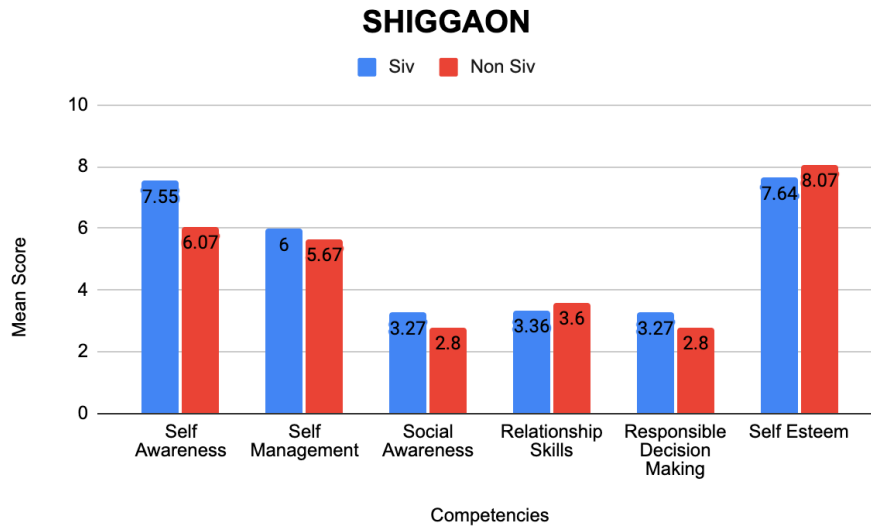


### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Shiggaon were assessed using a self-reported questionnaire. 10 students of the intervention group (SiV Students) and 16 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, and responsible decision making. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.



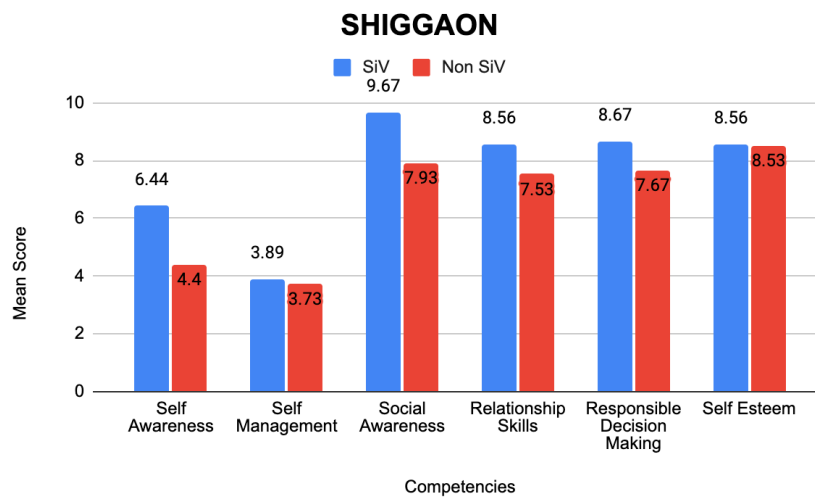
**Figure 38: Grade 8 - Karnataka - Shiggaon - Mean Scores of Intervention and Comparison group**



**Grade 9**

To investigate the impact of the *Skill in Village* program, grade 9 students of Shiggaon were assessed using a self-reported questionnaire. 9 students of the intervention group (SiV Students) and 15 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in social awareness scores compared to those in the comparison group. This demonstrates the change in social awareness levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills and responsible decision making & self-esteem. However only the change in social awareness is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

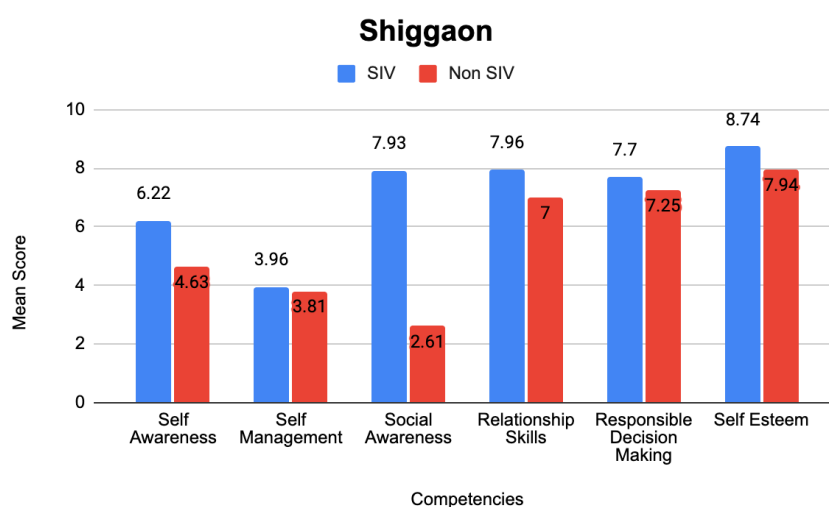
**Figure 39: Grade 9 - Karnataka - Shiggaon- Mean Scores of Interventions and Comparison group**



## Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Shiggaon were assessed using a self-reported questionnaire. 27 students of the intervention group (SiV Students) and 16 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management scores & self-esteem scores in comparison to those in the comparison group. This demonstrates the change in self-management & self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, self-esteem & responsible decision making. However only the change in self-management & self-esteem is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 40: Grade 10 - Karnataka - Shiggaon - Mean Scores of Interventions and Comparison group**

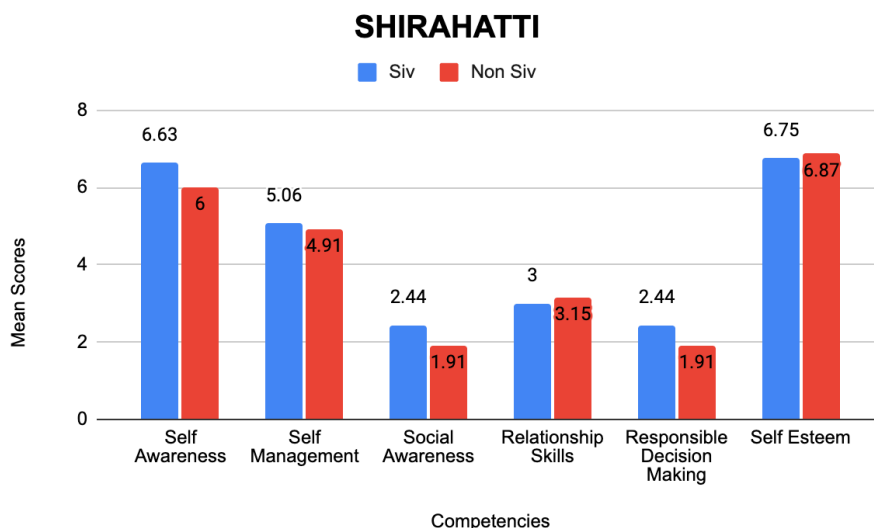


## Shirahatti

### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Shirahatti were assessed using a self-reported questionnaire. 15 students of the intervention group (SiV Students) and 53 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness & responsible decision making. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

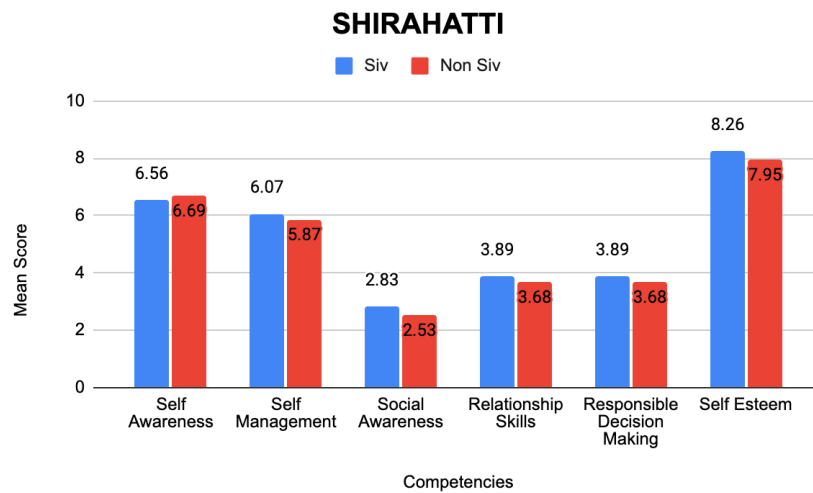
**Figure 41: Grade 7 - Karnataka - Shirahatti- Mean Scores of Intervention and Comparison group**



### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Shirahatti were assessed using a self-reported questionnaire. 10 students of the intervention group (SiV Students) and 16 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management social awareness scores & responsible decision making scores in comparison to those in the comparison group. This demonstrates the change in self-management, social awareness & responsible decision making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-management, social awareness, relationship skills, responsible decision making & self-esteem. However only the change in self-management, social awareness & responsible decision making is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

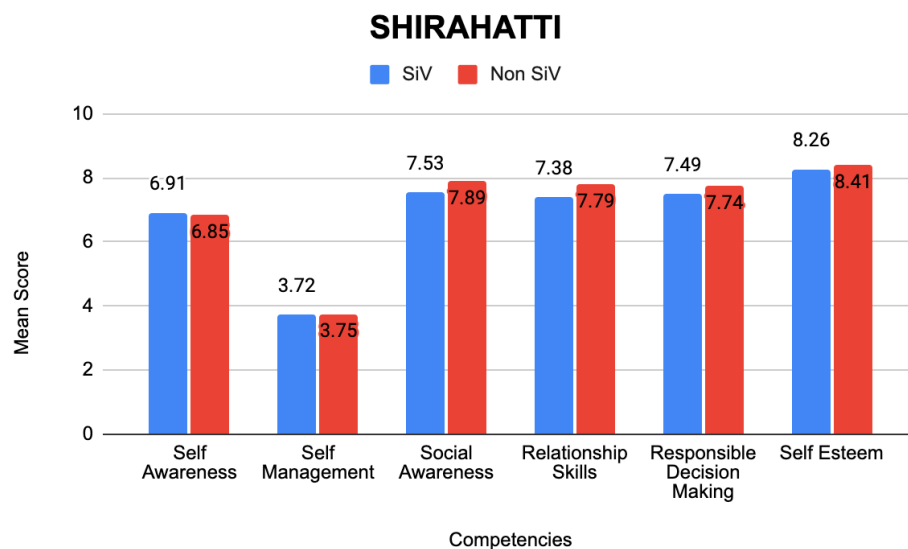
**Figure 42: Grade 8 - Karnataka - Shirahatti - Mean Scores of Intervention and Comparison group**



### Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Shirahatti were assessed using a self-reported questionnaire. 49 students of the intervention group (SiV Students) and 65 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

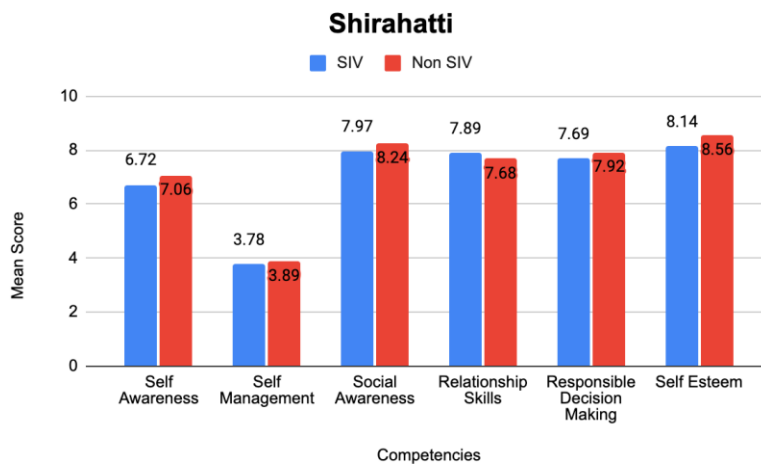
**Figure 43: Grade 9 - Karnataka - Shirahatti- Mean Scores of Intervention and Comparison group**



### Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Shiggaon were assessed using a self-reported questionnaire. 32 students of the intervention group (SiV Students) and 66 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in relationship skills. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

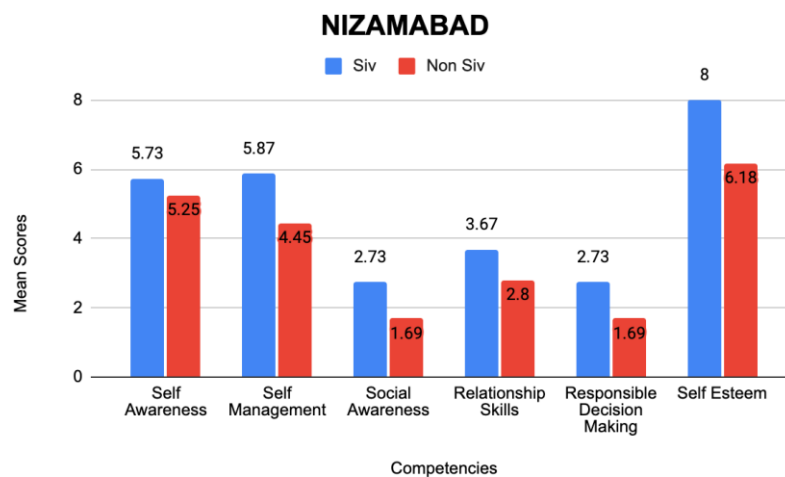
**Figure 44: Grade 10 - Karnataka - Shirahatti - Mean Scores of Intervention and Comparison group**



**Nizamabad  
Grade 7**

To investigate the impact of the *Skill in Village* program, grade 7 students of Nizamabad were assessed using a self-reported questionnaire. 15 students of the intervention group (SiV Students) and 65 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-awareness scores in comparison to those in the comparison group. This demonstrates the change in self-awareness levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making & self-esteem. However only the change in self-awareness is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

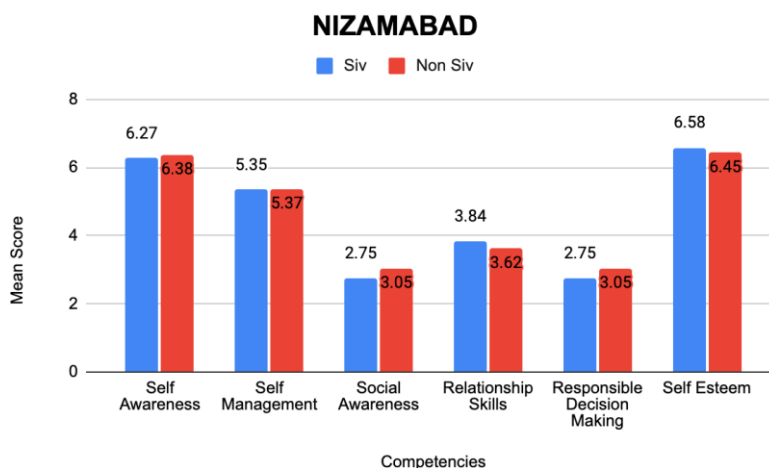
**Figure 45: Grade 7 - Telangana - Nizamabad - Mean Scores of Intervention and Comparison group**



### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Nizamabad were assessed using a self-reported questionnaire. 91 students of the intervention group (SiV Students) and 65 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in relationship skills & self-esteem. The change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

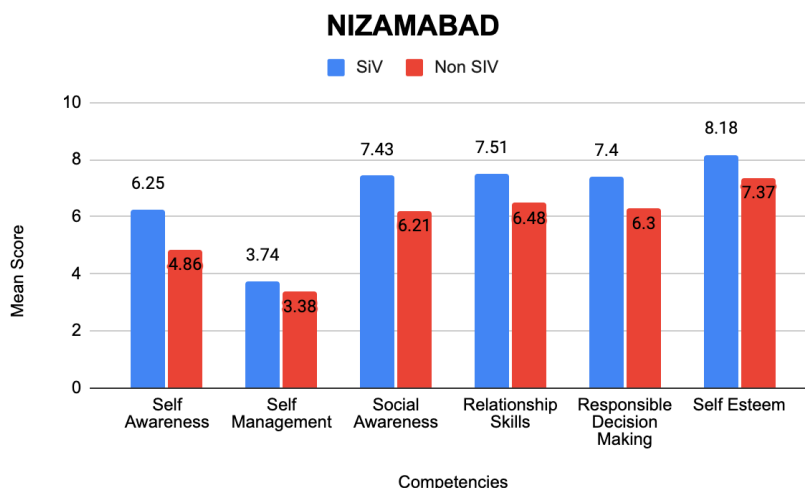
**Figure 46: Grade 8 - Telangana - Nizamabad - Mean Scores of Intervention and Comparison group**



### Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Nizamabad were assessed using a self-reported questionnaire. 88 students of the intervention group (SiV Students) and 63 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management, relationship skills, responsible decision making & self-esteem in comparison to those in the comparison group. This demonstrates the change in self-management, relationship skills, responsible decision making & self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making & self-esteem. However only the change in self-management, relationship skills, responsible decision making & Self-esteem is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

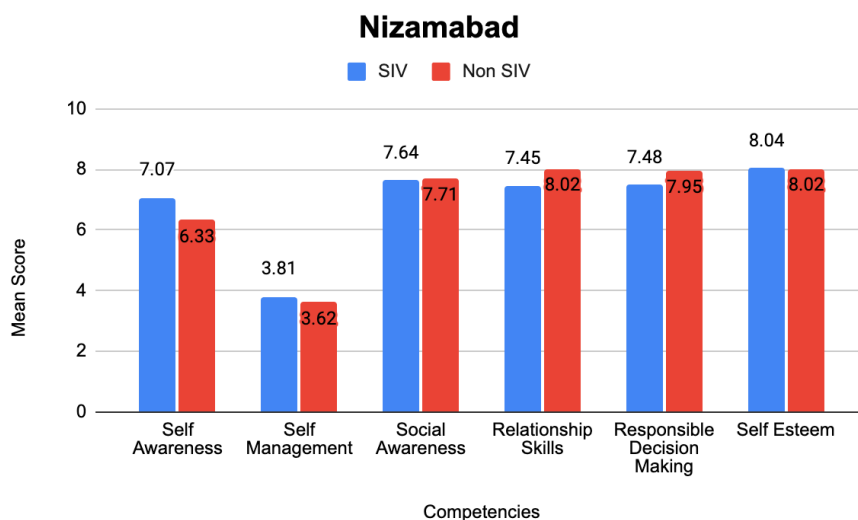
**Figure 47: Grade 9 - Telangana -Nizamabad- Mean Scores of Intervention and Comparison group**



**Grade 10**

To investigate the impact of the *Skill in Village* program, grade 10 students of Nizamabad were assessed using a self-reported questionnaire. 61 students of the intervention group (SIV Students) and 55 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in self-management scores in comparison to those in the comparison group. This demonstrates the change in self-management levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-management, & self-esteem. However only the change in self-management is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 48: Grade 10 - Telangana - Nizamabad - Mean Scores of Intervention and Comparison group**

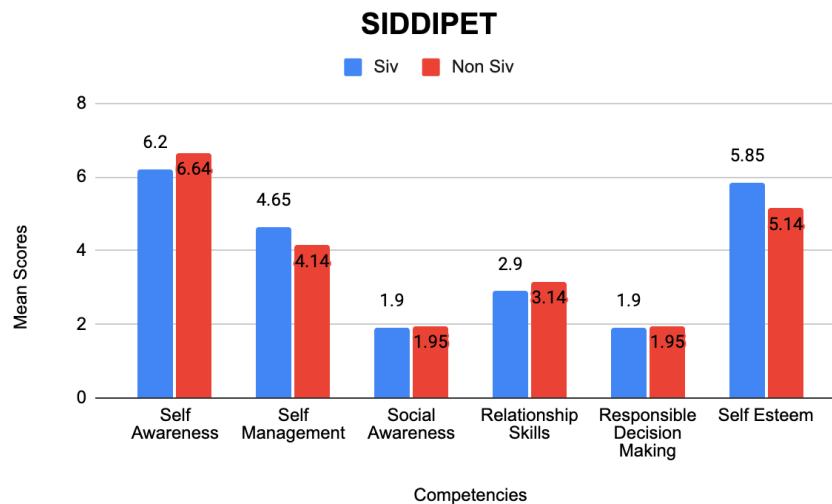


## Siddipet

### Grade 7

To investigate the impact of the *Skill in Village* program, grade 7 students of Siddipet were assessed using a self-reported questionnaire. 14 students of the intervention group (SiV Students) and 28 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-management and self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 49: Grade 7 - Telangana - Siddipet - Mean Scores of Interventions and Comparison group**

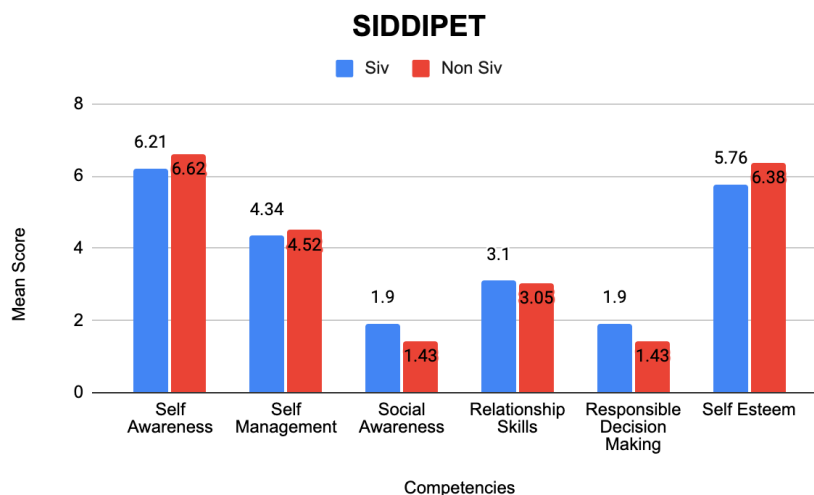


### Grade 8

To investigate the impact of the *Skill in Village* program, grade 8 students of Siddipet were assessed using a self-reported questionnaire. 22 students of the intervention group (SiV Students) and 28 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in social awareness scores & responsible decision making scores in comparison to those in the comparison group. This demonstrates the change in social awareness & responsible decision making levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in social awareness, relationship skills, & responsible decision making. However only the change in social awareness & responsible decision making is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.



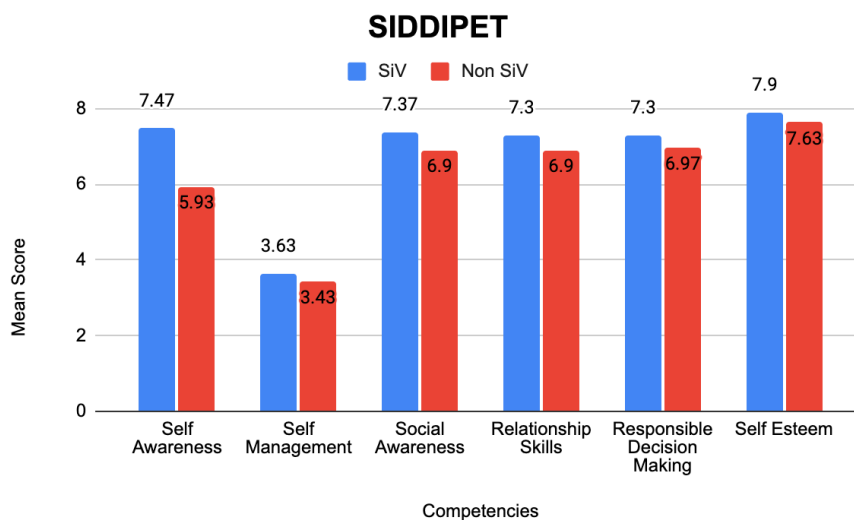
**Figure 50: Grade 8 - Telangana - Siddipet - Mean Scores of Intervention and Comparison group**



### Grade 9

To investigate the impact of the *Skill in Village* program, grade 9 students of Siddipet were assessed using a self-reported questionnaire. 27 students of the intervention group (SiV Students) and 32 students of comparison group (Non SiV) students were selected. There was no significant increase of any competencies demonstrated in the intervention group in comparison to those in the comparison group. A bar chart was constructed to display the mean score differences for all 6 competencies (see Figure 1). A mean difference is observed in self-awareness, self-management, social awareness, relationship skills, responsible decision making, & self-esteem. However the change in the competencies is due to chance factors and not necessarily an outcome of the intervention.

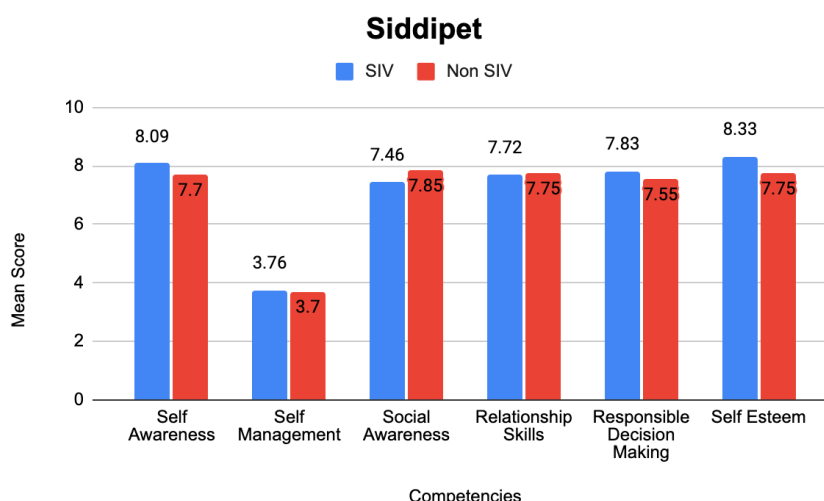
**Figure 51: Grade 9 - Telangana- Siddipet - Mean Scores of Interventions and Comparison group**



### Grade 10

To investigate the impact of the *Skill in Village* program, grade 10 students of Siddipet were assessed using a self-reported questionnaire. 45 students of the intervention group (SiV Students) and 21 students of comparison group (Non SiV) students were selected. Those in the intervention group demonstrated a significant increase in relationship skills scores & self-esteem scores in comparison to those in the comparison group. This demonstrates the change in relationship skills & self-esteem levels of students in the intervention group is attributed to the SiV program. A bar chart was constructed to display the mean score differences for all 6 competencies. A mean difference is observed in self-awareness, self-esteem & responsible decision making. However only the change in relationship skills & self-esteem is attributable to the programmatic intervention, change in other competencies is due to chance factors and not necessarily an outcome of the intervention.

**Figure 52: Grade 10 - Telangana - Siddipet - Mean Scores of Interventions and Comparison group**



### Trend Analysis

To understand the trends in the data collected, it was assessed if there is any difference in the levels of life skills of students who attended the program for 1, 2 and 3 years. Further, it was assessed if there is any difference in the levels of life skills of students who attended the program through the online medium regularly, irregularly/partially or were absent. The trends are analyzed in the following sections.

### Middle School – Number of years of participation

A one-way ANOVA was performed to compare the impact of the number of years of student participation (middle grades 7 & 8) in the SiV program on the development of life skills. The ANOVA conducted revealed that there was a statistically significant difference between at least 2 groups in the following life skills – self-management [ $F(2,289) = 3.564, p = 0.029$ ], social awareness [ $F(2,289) = 3.199, p = 0.042$ ], relationship skills [ $F(2,289) = 5.454, p = 0.005$ ] and responsible decision making [ $F(2,289) = 3.199, p = 0.042$ ].

**Table 52: Grade 7&8 - Means, Standard Deviation and Analysis of Variance in Life Skills \_Number of years of participation in Middle School**

Means, Standard Deviations and Analysis of Variance in Life skills (Middle School)									
	1 year		2 years		3 years		F (2, 389)	p	$\eta^2$
	M	SD	M	SD	M	SD			
Self-awareness	6.69 <sub>a</sub>	1.96	6.75 <sub>a</sub>	1.99	6.79 <sub>a</sub>	2.11	0.085	0.918	0.00
Self-management	5.42 <sub>a</sub>	2.03	5.75 <sub>a,b</sub>	1.96	6.06 <sub>b</sub>	1.76	3.564	0.029*	0.018
Social awareness	2.52 <sub>a</sub>	2.03	2.97 <sub>a</sub>	1.95	3.08 <sub>b</sub>	1.85	3.199	0.042*	0.016
Relationship skills	3.56 <sub>a</sub>	1.64	3.71 <sub>a,b</sub>	1.74	4.22 <sub>c</sub>	1.46	5.454	0.005*	0.027
Responsible decision making	2.52 <sub>a</sub>	2.03	2.97 <sub>a</sub>	1.95	3.08 <sub>a</sub>	1.85	3.199	0.042*	0.016
Self-esteem	7.25 <sub>a</sub>	2.39	7.30 <sub>a</sub>	2.47	7.69 <sub>a</sub>	2.14	1.284	0.278	0.007

**Note:** Means in a row not sharing a subscript are significantly different from one another

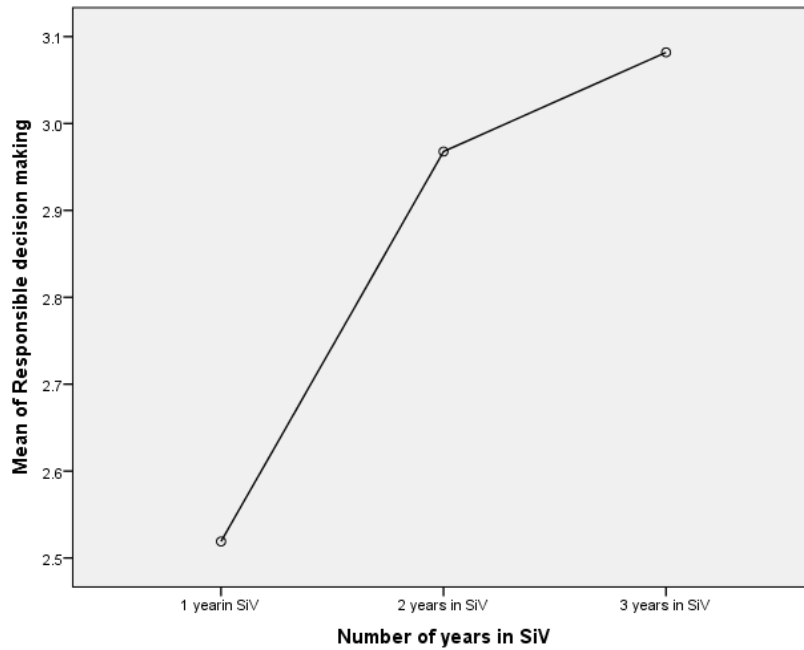
To understand where the significance between the groups is resulting from, Tukey’s HSD test for multiple comparisons were conducted. A significant difference in improvement was found in **self-management** competency ( $p = 0.029, 95\% \text{ CI} = [-1.21, -0.07]$ ) between students who participated in the SiV program for 1 and 3 years.

**Figure 53: Change in Self-Management skills among students who were enrolled for 1,2 and 3 years Middle School**



A significant difference in improvement was noticed in **relationship skills** between students who participated in the SiV program for 1 and 3 years ( $p=0.42$ , 95% CI = [ -1.13, -0.18]) and also a significant difference between students who participated in SiV program for 2 and 3 years ( $p=0.42$ , 95% CI = [ -1.01, -0.01])

**Figure 54: Change in Responsible decision making among students who were enrolled for 1,2 and 3 years - Middle School**



There has been an improvement noticed in self-management, social awareness, relationship skills and responsible decision making among students who attended the program for more than one year. Those students who have participated in the program for 3 years have shown better scores in life skills than those who have participated for a year in the program. This implies the increase in the number of years of participation in the SiV program has a positive influence on life skills development in students. Although some improvement in other competencies can be noticed, they are not statistically significant.

#### **High School - Number of years of participation**

A one-way ANOVA was performed to compare the impact of the number of years of student participation (secondary grades -9 & 10) in SiV program on the development of life skills. The ANOVA conducted revealed that there is a statistically significant difference between at least 2 groups was found in the following skills – self-awareness [ $F(2,308) = 4.707, p=0.010$ ] and social awareness [ $F(2,308) = 54.995, p=0.00$ ].

**Means, Standard Deviations and Analysis of Variance in Life skills (High School)**

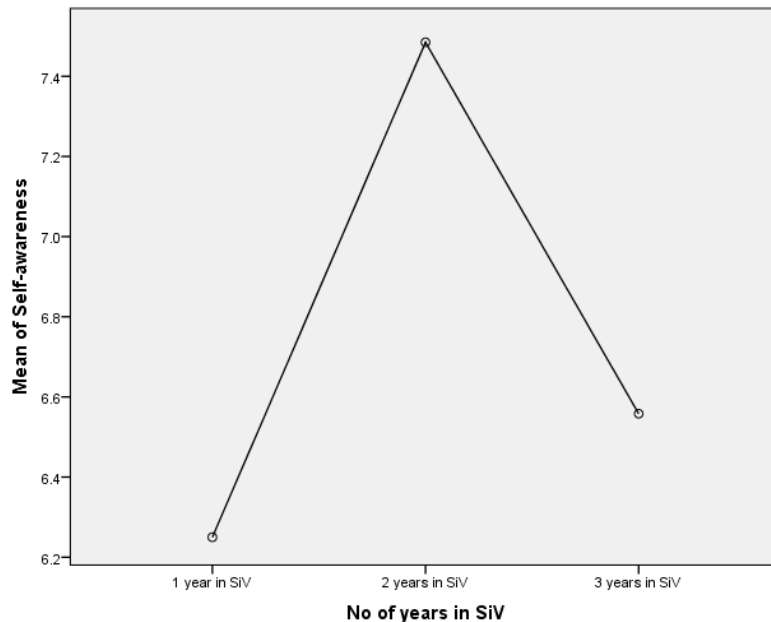
**Table 53 :Grade 7&8 - Means, Standard Deviation and Analysis of Variance in Life Skills \_Number of years of participation in High School**

	1 year		2 years		3 years		F (2, 308)	p	η <sup>2</sup>
	M	SD	M	SD	M	SD			
Self-awareness	6.25 <sub>a</sub>	3.36	7.48 <sub>b</sub>	3.16	6.56 <sub>a,b</sub>	3.81	4.70	0.01*	0.030
Self-management	3.70 <sub>a</sub>	0.74	3.73 <sub>a</sub>	0.63	3.86 <sub>a</sub>	0.41	0.99	0.37	0.006
Social awareness	3.68 <sub>a</sub>	2.62	3.70 <sub>a</sub>	2.45	8.0 <sub>b</sub>	2.22	54.99	0.00*	0.263
Relationship skills	7.62 <sub>a</sub>	2.20	7.59 <sub>a</sub>	2.21	7.77 <sub>a</sub>	1.98	0.10	0.89	0.001
Responsible decision making	7.66 <sub>a</sub>	1.85	7.55 <sub>a</sub>	1.99	7.88 <sub>a</sub>	1.65	0.531	0.58	0.003
Self-esteem	8.26 <sub>a</sub>	1.54	8.12 <sub>a</sub>	1.63	8.49 <sub>a</sub>	1.16	0.958	0.38	0.006

**Note:** Means in a row not sharing a subscript are significantly different from one another

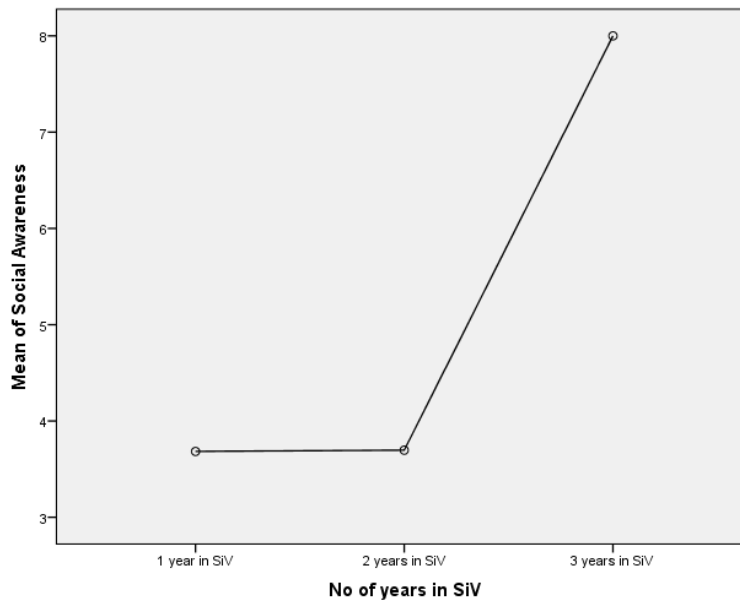
To understand where the significance between the groups is resulting from, Tukey’s t-test was conducted. It was found that the difference between the mean values of **self-awareness** was significantly improved between students who participated in the program for 1 & 2 years. (p=0.010, 95% CI [-2.20, -0.27])

**Figure 55 : Change in self-awareness among students who were enrolled for 1,2 and 3 years High School**



A significant improvement is noticed in the mean score values of **social awareness** in students who have participated in the program for 1 and 3 years (p=0.00 , 95% CI [-5.35 , -3.29])

**Figure 56 : Change in social awareness among students who were enrolled for 1,2 and 3 years in High School**



There has been an improvement noticed in competencies – self-awareness and social awareness among students who attended the program for more than one year. This implies the number of years of participation in the SiV program has a positive influence on developing life skills in students.

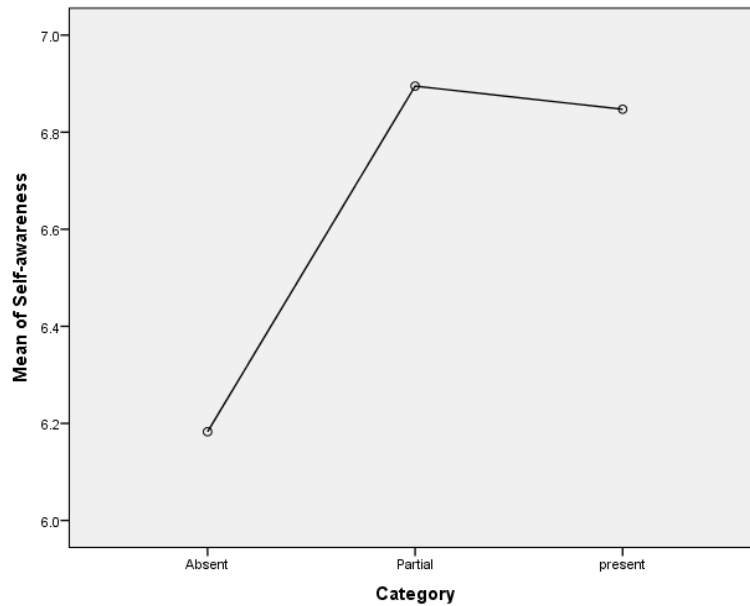
#### Middle School - Students' Participation rate in Online Classes

A one-way ANOVA was performed to compare the impact of student participation rate (absent, partially attended and present) in the SiV program on the development of life skills in middle school students (grade 7&8). A one-way ANOVA conducted revealed that there is an influence of the student participation rate on the improvement in life skills in at least 2 groups in the following skills - self-awareness [F (2,402)=4.335 , p=0.014] , self-management [F (2, 402) = 7.087 , p=0.001] , relationship skills [F(2, 402) = 4.234 , p=0.015 ] and self-esteem [F (2, 402) = 10.54 , p= 0.000].

Means, Standard Deviations and Analysis of Variance in Life skills (Middle School)									
Table 54 :Grade 7&8 - Means, Standard Deviation and Analysis of Variance in Life Skills _students' Participation rate in Online Classes Middle School									
	Absent		Partial		Present				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<b>F (2, 402)</b>	<b>p</b>	$\eta^2$
Self-awareness	6.18 <sub>a</sub>	2.08	6.90 <sub>b</sub>	1.87	6.85 <sub>b</sub>	2.08	4.335	0.014	0.021
Self-management	5.04 <sub>a</sub>	2.43	5.79 <sub>b</sub>	1.74	5.99 <sub>b</sub>	1.75	7.087	0.001	0.034
Social awareness	2.52 <sub>a</sub>	2.07	2.80 <sub>a</sub>	1.97	2.95 <sub>a</sub>	1.87	1.363	0.257	0.007
Relationship skills	3.48 <sub>a</sub>	1.80	3.67 <sub>a, b</sub>	1.68	4.09 <sub>b</sub>	1.47	4.234	0.015	0.021
Responsible decision making	2.52 <sub>a</sub>	2.07	2.80 <sub>a</sub>	1.97	2.95 <sub>a</sub>	1.87	1.363	0.257	0.007
Self-esteem	6.40 <sub>a</sub>	2.87	7.67 <sub>b</sub>	2.18	7.64 <sub>b</sub>	2.03	10.54	10.54	0.050
<b>Note:</b> Means in a row not sharing a subscript are significantly different from one another									

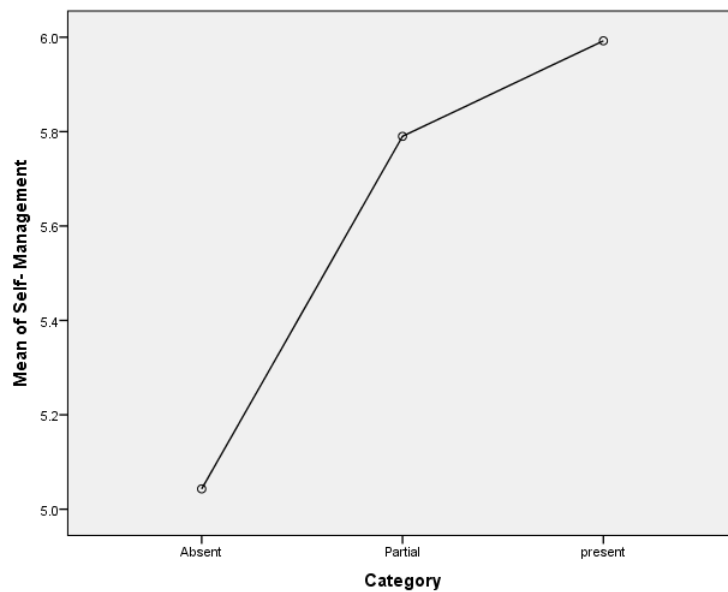
Tukey's t-test found a significant difference in the levels of **self-awareness** between students who were absent and those who partially attended the SiV program (p=0.014, 95% CI [-1.31, -0.11]) and also between students who were absent and those who attended the program (p=0.014, 95%CI = [-1.30, -0.03]).

**Figure 57: Change in self-awareness among students Middle School**



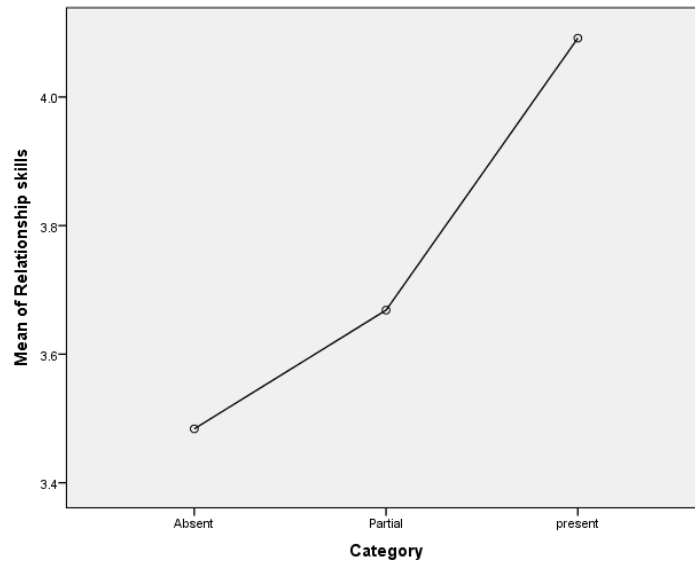
The mean values of **self-management** were also found to be significantly different between students who were absent and those who partially attended the program ( $p=0.01$  ,95% CI [-1.33, -0.17]) . The difference was also noticed between students who were absent and those who attended the program regularly ( $p=0.01$  ,95% CI [-1.56, -0.33]).

**Figure 58: Change in self-management among students Middle School**



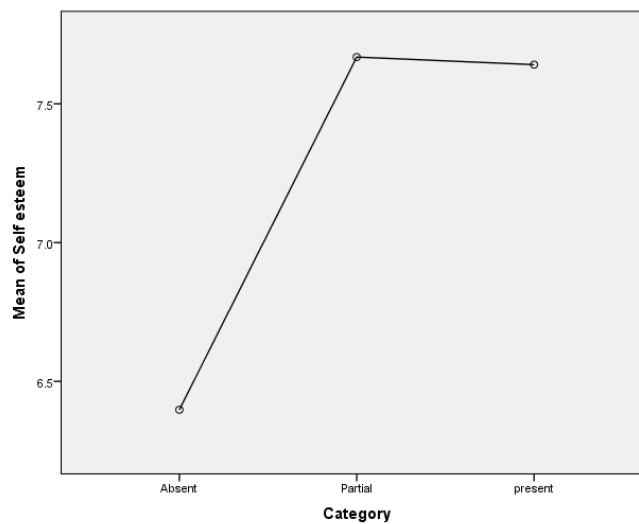
The mean values of the skill - **relationship skills** were found to be significant between students who were absent and those who partially attended the SiV program ( $p=0.015$ , 95% CI [-1.13, -0.08])

**Figure 59: Change in relationship skills among students Middle School**



The mean values of **self-esteem** were found to be significant between students who were absent and those partially attended the SiV program ( $p=0.00$ , 95% CI [-1.97, -0.57]). Also, a significant difference was found between students who were absent and those who attended the program ( $p=0.00$ , 95% CI [-1.98, -0.50])

**Figure 60: Change in self-esteem among students Middle School**



The analysis has helped to understand the influence of the student participation in the program on the development of life skills in students. This has confirmed the participation of students in the SiV program has helped in developing the life skills of students at middle grade level.

#### High School - Students' Participation rate

A one- way ANOVA was performed to compare the effect of student participation rate (absent, partially attended and present) on the development of life skills in high school children. A one-way ANOVA revealed that there is a statistically significant difference between at least 2 groups in self – awareness [ $F(2,406) = 15.99$ ,  $p=0.00$ ] and social awareness [ $F(2,406) = 6.253$ ,  $p=0.002$ ]

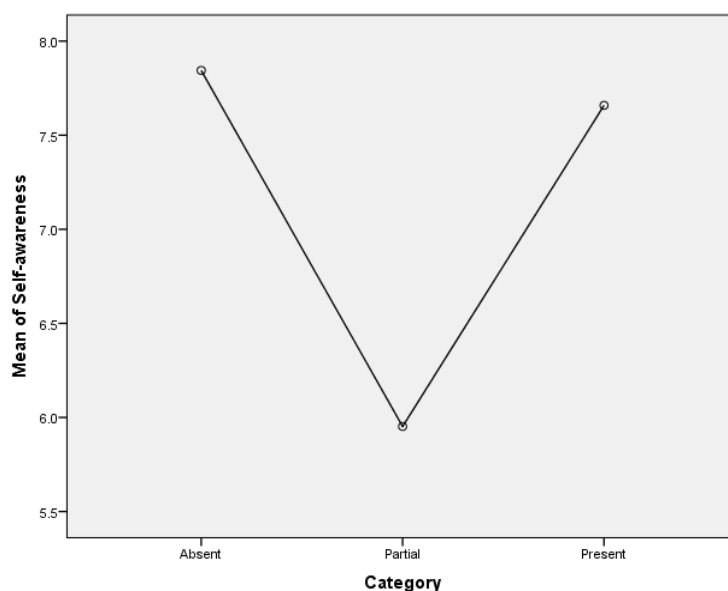
Means, Standard Deviations and Analysis of Variance in Life skills (High School)									
Table 55: Grade 7&8 - Means, Standard Deviation and Analysis of Variance in Life Skills _Students' Participation rate in Online Classes_ High School									
	Absent		Partial		Present				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2, 406)	<i>p</i>	$\eta^2$



Self-awareness	7.84 <sub>a</sub>	2.80	5.95 <sub>b</sub>	3.41	7.66 <sub>a, b</sub>	2.99	15.99	0.00	0.073
Self-management	3.84 <sub>a</sub>	0.46	3.75 <sub>a</sub>	0.65	3.74 <sub>a</sub>	0.65	0.814	0.44	0.004
Social awareness	3.00 <sub>a</sub>	1.10	3.78 <sub>b</sub>	2.60	3.07 <sub>a</sub>	1.56	6.253	0.002	0.030
Relationship skills	7.94 <sub>a</sub>	1.78	7.45 <sub>a</sub>	2.18	7.80 <sub>a</sub>	2.26	1.920	0.148	0.009
Responsible decision making	8.01 <sub>a</sub>	1.46	7.51 <sub>a</sub>	1.88	7.78 <sub>a</sub>	2.00	2.280	0.104	0.011
Self-esteem	8.52 <sub>a</sub>	1.07	8.28 <sub>a</sub>	1.52	8.25 <sub>a</sub>	1.55	0.922	0.399	0.005
<b>Note:</b> Means in a row not sharing a subscript are significantly different from one another									

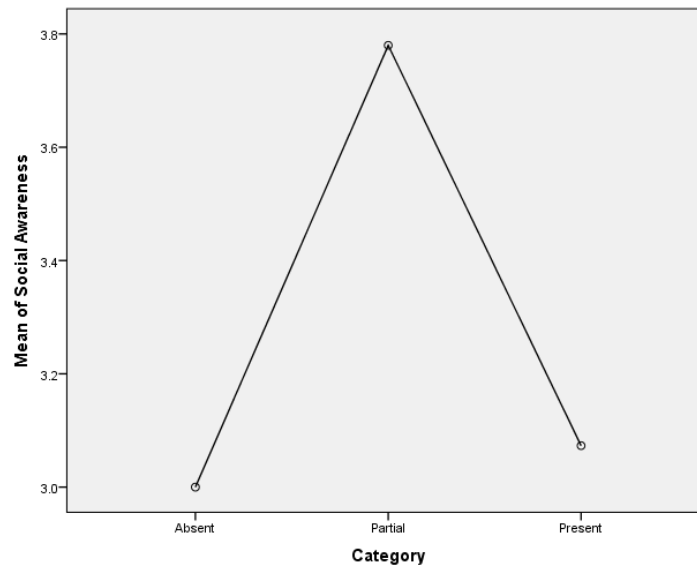
A one-way ANOVA revealed that there is a statistically significant difference between at least 2 groups in self – awareness [ $F(2,406) = 15.99, p = 0.00$ ] and social awareness [ $F(2,406) = 6.253, p = 0.002$ ]. With Tukey's t-test, it was found that the mean values of **self-awareness** were found to be significant between students who attended the SiV program partially and those who attended it throughout ( $p = 0.00, 95\% CI = [-2.56, -0.85]$ )

**Figure 61 : Change in self-awareness among students High School**



The same analysis found that mean value of **social awareness** to be significant between students who were absent and partially attended the SiV program ( $p = 0.002, 95\% CI = [-1.44, -0.12]$ )

**Figure 62: Change in social awareness among students in High School**



The analysis confirms the participation of students in the SiV program has an influence on the development of life skills in high school students. This confirms the regular participation in the SiV program results in the improved levels of life skills in students. Although there are improvements noticed in life skills that are not mentioned above, they do not show a significant improvement and cannot be completely attributable to the program.

## Students Self Perception

Student's self-perception of their English language skills was assessed using a self-reported checklist. This checklist was part of the student's survey. The checklist consisted of 10 statements which primarily aimed to understand student's perception of their improvement in English language skills and how it impacted their confidence levels. Each of these statements were followed by two options: I agree and I disagree. For analysis purpose each of these statements were assigned 1 point and then the points were categorised into 3 ranges :

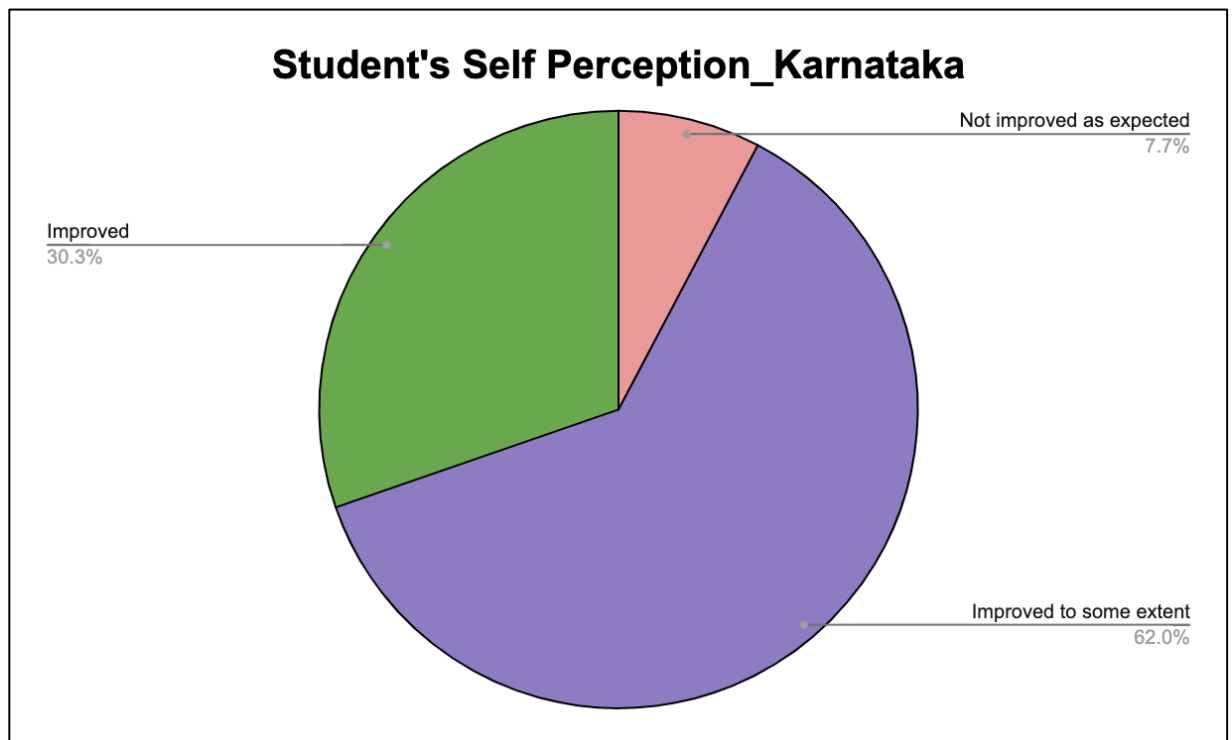
Not improved as expected = 0-4 points

Improved to some extent = 5-7 points

Improved = 8-10 points

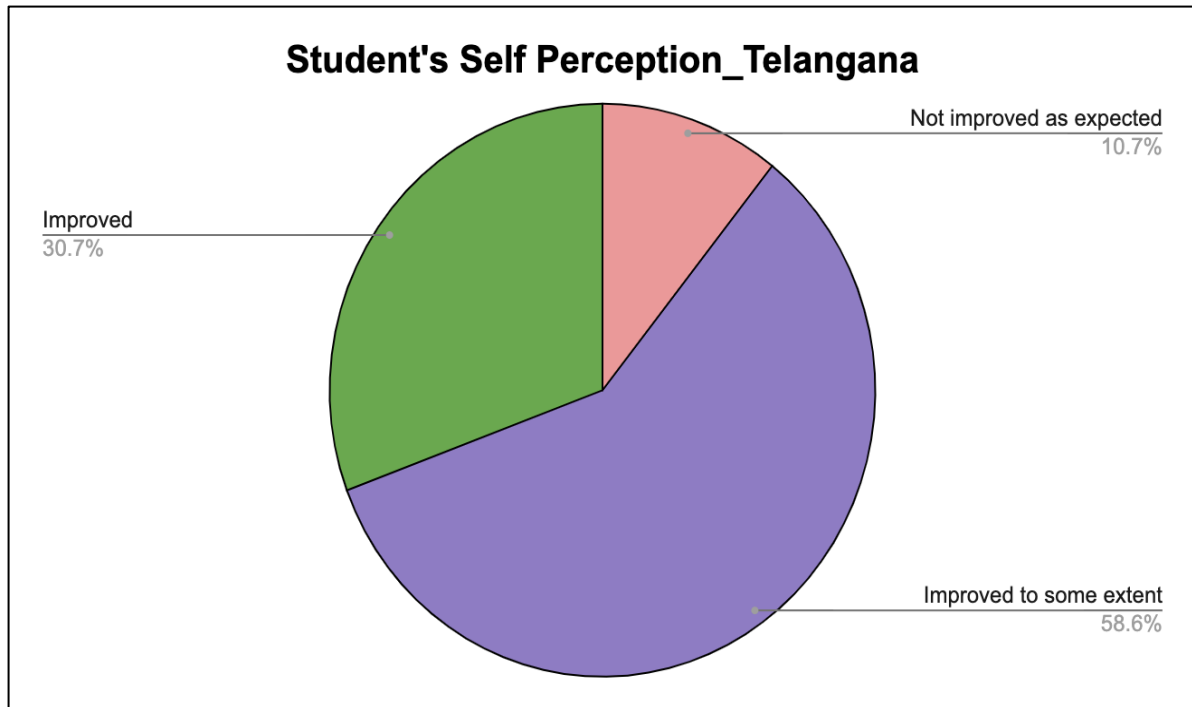
In this section the analysis is divided into two sections - self-perception of grade 7,8,9 and 10 students in Karnataka followed by Telangana.

**Figure 63: Self Perception of Students Karnataka**



- 30.3% of students perceive that post the program their English language skills have improved.
- 62% of students perceive that post the program their English language skills have improved to some extent.
- 7.7% students perceive post the program their English language skills have not improved as expected.

Figure 64: Self Perception of Students Telangana



- 30.7% of students perceive that post the program their English language skills have improved.
- 8.6 % of students perceive that post the program their English language skills have improved to some extent.
- 10.68% of students perceive that post the program their English language skills have not improved as expected

### 5.3 Survey

#### KARNATAKA

##### Student responses in Karnataka

The table below shows the findings from student survey conducted in Karnataka

**Table 56. Student responses on survey conducted in Karnataka**

**Have your school English test scores improved after starting the SiV program?**

About 96% of students responded that their English test scores have improved after the SiV intervention.

**Do you enjoy your SiV class?**

80% of students reported that they always enjoy SiV classes

**Is the SiV class more fun than your school English class?**

60% of students find SiV classes more fun than regular school English classes. While 20% of students usually find SiV classes more fun, only 2% of students reported that they rarely found SiV classes more fun than regular classes.

**Do you get support from the SiV trainer to take part in the SiV activities?**

71% of students reported that they got support from SiV trainers to participate in SiV related activities. While 3% of students reported that they did not get support from SiV trainers to participate in SiV related activities.

**Do you feel that the activities and language used in the SiV class are too difficult for you to understand?**

45% of students responded that they do not feel the activities and language used in SiV classes are too difficult to understand. 36% of students responded that they sometimes find the activities and SiV language difficult to understand. 18% of students responded that they do feel that the activities and language used in the SiV class are too difficult for them to understand.

**Do you believe that the SiV class activities are helping you in any way?**

94% of students believe that SiV class activities are helping them in any way.

**Do you feel eager to take part in competitions or activities which require English speaking skills, such as debates, elocutions etc. after starting SiV classes?**

93% of students feel eager to take part in competitions or activities which require English speaking skills, such as debates, elocutions etc. after starting SiV classes.

**Does the SiV class timetable clash with other activities (such as sports, arts, music, dance etc.)?**

59% of students do not find SiV class timetable clashing with non- academic activities while 19% responded that their SiV class timetable clashes with other activities.

##### Parent Responses in Karnataka

**Table 57. Responses from Parent survey conducted in Karnataka**

43% of parents responded that they received weekly communication by the SiV team while 22% received monthly communication. 8% of parents reported that they never received such communication from the SiV team while 12% of parents claimed that the SiV team rarely communicated with them.

27% of parents reported that they were satisfied with SiV trainers while 23% of parents responded that they were satisfied with SiV trainers, SiV books, SiV classes, SiV homework, and my child's progress.

38% Parents responded that they believed more and regular communication about their child's progress should be communicated to them while 12% of parents reported that their is scope of improvement by better trainers, better workbooks, more classes per week, more and regular communication about their child's progress.

**Following responses by parents were given in the context of their knowledge on the interest of their child in SiV classes:**

19% of parents responded that their child is very interested in attending the SiV classes and their child attends the SiV class regularly.

About 6% of parents also additionally reported that they believe their child is very interested in attending the SiV classes and their child attends the SiV class regularly while their child uses English more frequently after starting the SiV classes.

**Following are the responses parents agreed with about their child's time and interest in the other activities:**

23% of parents often have to choose between sending their child to SiV class or other activities (such as family occasions, sports, arts, music, dance, etc.)

While 25% of parents believe that their child engages more in other extracurricular activities after starting SiV classes.

Additionally, 17% of parents also believe that their child engages more in other extracurricular activities after starting SiV classes and the SiV program also takes up too much time in my child's week

**Following are the responses parents agreed with about their expectations on their child learning English and life skills.**

38% of parents wish their other children could also participate in the SiV program to learn English and life skills.

21% of parents wish their other children could also participate in the SiV program to learn English and life skills. They believe their child will be treated with more respect and dignity upon learning English and additionally, they will also be treated with more respect and dignity if my child speaks English. They believe their child will have more opportunities to find well-paying work if he/she speaks English and their child will be better able to handle and deal with government officials, forms, and applications etc. if he/she speaks English.

**Following responses were reported by parents on their involvement with the SiV team.**

40% of parents responded that they know what is being covered in the SiV program each week and how their child is doing.

While 4% parents additionally stated that if there are any issues with the SiV program implementation, they are informed promptly by the team.

## **TELANGANA**

### **Student survey responses in Telangana**

**Table 58. Student responses on survey conducted in Telangana**

**Have your school English test scores improved after starting the SiV program?**

About 92% of students responded that their English test scores have improved after the SiV intervention.

**Do you enjoy your SiV class?**

84% of students reported that they always enjoy SiV classes

**Is the SiV class more fun than your school English class?**

62% of students find SiV classes more fun than regular school English classes. While 19% of students usually find SiV classes more fun, 10% of students reported that they rarely found SiV classes more fun than regular classes.

**Do you get support from the SiV trainer to take part in the SiV activities?**

89% of students reported that they got support from SiV trainers to participate in SiV related activities. While 9% of students reported that they did not get support from SiV trainers to participate in SiV related activities.

**Do you feel that the activities and language used in the SiV class are too difficult for you to understand?**

32% of students responded that they do not feel the activities and language used in SiV classes are too difficult to understand.

**Do you believe that the SiV class activities are helping you in any way?**

93% of students believe that SiV class activities are helping them in any way.

**Do you feel eager to take part in competitions or activities which require English speaking skills, such as debates, elocutions etc. after starting SiV classes?**

86% of students feel eager to take part in competitions or activities which require English speaking skills, such as debates, elocutions etc. after starting SiV classes.

**Does the SiV class timetable clash with other activities (such as sports, arts, music, dance etc.)?**

47% of students do not find SiV class timetable clashing with non- academic activities while 19% responded that their SiV class timetable clashes with other activities.

## Parent responses in Telangana

**Table 59. Parent Responses**

43% of parents responded that they received weekly communication by the SiV team while 22% received monthly communication. 8% of parents reported that they never received such communication from the SiV team while 12% of parents claimed that the SiV team rarely communicated with them.

27% of parents reported that they were satisfied with SiV trainers while 23% of parents responded that they were satisfied with SiV trainers, SiV books, SiV classes, SiV homework, and my child's progress.

38% Parents responded that they believed more and regular communication about their child's progress should be communicated to them while 12% of parents reported that their is scope of improvement by better trainers, better workbooks, more classes per week, more and regular communication about their child's progress.

### **Following responses by parents were given in the context of their knowledge on the interest of their child in SiV classes:**

19% of parents responded that their child is very interested in attending the SiV classes and their child attends the SiV class regularly.

About 6% of parents also additionally reported that they believe their child is very interested in attending the SiV classes and their child attends the SiV class regularly while their child uses English more frequently after starting the SiV classes.

### **Following are the responses parents agreed with about their child's time and interest in the other activities:**

23% of parents often have to choose between sending their child to SiV class or other activities (such as family occasions, sports, arts, music, dance, etc.)

While 25% of parents believe that their child engages more in other extracurricular activities after starting SiV classes.

Additionally, 17% of parents also believe that their child engages more in other extracurricular activities after starting SiV classes and the SiV program also takes up too much time in my child's week

### **Following are the responses parents agreed with about their expectations on their child learning English and life skills.**

38% of parents wish their other children could also participate in the SiV program to learn English and life skills.

21% of parents wish their other children could also participate in the SiV program to learn English and life skills. They believe their child will be treated with more respect and dignity upon learning English and additionally, they will also be treated with more respect and dignity if my child speaks English. They believe their child will have more opportunities to find well-paying work if he/she speaks English and their child will be better able to handle and deal with government officials, forms, and applications etc. if he/she speaks English.

### **Following responses were reported by parents on their involvement with the SiV team.**

40% of parents responded that they know what is being covered in the SiV program each week and how their child is doing.

While 4% parents additionally stated that if there are any issues with the SiV program implementation, they are informed promptly by the team.



## SiV trainers' responses

Following responses were noted from the online survey conducted for SiV trainers:

**Table 60. SiV trainers' responses**

### **Experience of SiV trainers with conducting group activities in the SiV classroom**

In Telangana it was noted that 90% of the SiV trainers felt that students enjoy learning through group learning activities. While in Karnataka, all the respondents felt that students enjoy learning through group learning activities.

### **SiV trainers' experience in using teaching aids like flash cards/ videos/ textbooks/ worksheets support their teaching in the classroom.**

In Telangana, 63.3% of participants reported that teaching learning aids like flash cards/ videos/ textbooks/ worksheets support their teaching in the classroom. 45.4% of SiV trainers find teaching learning aids are easy to use while 18.2% of trainers felt that there is a shortage of teaching aids in their schools while it's also challenging to use technological teaching aids in the classroom. In Karnataka all the respondents believe teaching aids support their teaching in the classroom.

### **Curiosity level among children in classroom**

In Telangana about 72.7% of the participants have observed that most of the students ask questions related to the lesson taught. While 45.5% of the SiV trainers have observed that few students apply lessons learnt in the classroom in their daily lives. In Karnataka, 80% trainers felt that few students apply lessons learnt in the classroom in their daily lives.

### **Participation level among children in classroom**

In Telangana, about 90.9% SiV trainers reported that in their class there are only a few students who actively participate in the classroom.

In Karnataka, 80% trainers felt that students actively participate in classroom activities and discussion.

### **Student's response to group activities**

In Telangana, about 54.5% SiV trainers reported that they observed that students divide tasks among themselves and clarify each other's doubts. In Karnataka, 80% trainers reported that students collectively plan how to proceed in an activity.

### **SiV trainer's opinion on curriculum design of SiV program**

In Telangana, 54.5% of SiV trainers reported that they feel that the SiV curriculum is designed based on the cultural context of a child. 45.5% of SiV trainers believe the SiV curriculum is age appropriate. While 18.2% respondents also believe that there is a scope of changing the curriculum according to local context. In Karnataka, 80% trainers felt that the curriculum gives children the opportunity to showcase their skills.



6

This evaluation study assesses the impact of the program on English language skills and Life skills of students in the years 2017 - 2020. This period of intervention coincides with the pandemic period. Hence the intervention did not take place as planned in the years 2018-2020 for 1.5 years. While online classes were conducted the outreach was limited due to the accessibility issues. Most of the students could not access android gadgets with stable internet connection to attend the classes. The literature review identifies that in 6 states of India not more than 20% of the students had laptops/computers for online learning. In comparison to learning opportunities in face-to-face schools, short-term self-study through remote learning resources were determined to contribute the least to children's academic, social, emotional, psychological, physical, and cultural development (UNICEF, 2020). School closures have a notable negative influence on children's learning. In the case of life skills education, it is important to note that interaction in physical space is very different from the ones happening in online space. In a physical classroom teachers have more opportunities to observe/track emotions and feelings of children throughout the day. The medium of interaction impacts the opportunities students are presented to practice life skills in real time. Hence given the negative impact of Covid pandemic on learning and children's social emotional well-being have impacted the results of this evaluation study.

It was found that there was a notable mean difference in SiV and Non SiV students in grades 9&10. At an overall level, the average scores of students in both English and Analytical thinking have increased as the years of SiV intervention have increased. It was noted that students in grade 7&8 have a higher proficiency level than students of grade 9&10. At lower grade levels – 7&8, boys are performing better than girls while in higher grades of 9 & 10. The performance of students was higher among SiV students than Non-SiV students across all the grades in Karnataka. Proficiency levels across all grades were noted to be higher for SiV students. In Telangana, however, average scores and proficiency levels were not significantly different between SiV and Non SiV students.

It was found that the program has significantly impacted grade 8, 9, 10 students' life skills than grade 7 students considering cluster level data analysis. Further, it was found that among middle school students (grade 7 & 8) there has been an improvement noticed in skills – self-management, social awareness, relationship skills and responsible decision making among students who attended the program for more than one year. In the case of high school students (grade 9 & 10) it was found there has been an improvement noticed in competencies – self-awareness and social awareness among students who attended the program for more than one year. This implies the number of years of participation in the SiV program has a positive influence on developing life skills in students. These findings are in line with a meta-analysis conducted by Taylor et al (2017). The meta-analysis found that schools that implemented a systemic universal whole intervention for 56-195 weeks showed significant improvement in competencies. Hence duration and nature of the intervention determines the significance of improvement in skills and competencies in case of life skill education.

It was found that middle school students (grade 7&8) who attended the online SiV classes regularly showed better competency levels in self-awareness, self-management, relationship skills and self-esteem compared to the students who could not attend the online classes. In similar lines students who regularly attended the online classes have shown a better competency level in self-awareness, self-management and self-esteem compared to students who were not regular to the online classes. In the case of high school students (grade 9 & 10) who attended the online SiV classes regularly showed better competency levels in self-awareness and social awareness compared to students who attended the classes irregularly. Similar trends were observed in the self-awareness skills between students who attended the classes irregularly and students who could not attend the online classes. In the literature review it was found children who could not attend online classes are performing at far below level in comparison to children who have continued to attend school online (UNICEF, 2020). Student's self-perception of their English language skills and how it impacted their confidence levels was assessed through a self-reported checklist. It was found that 30.3% students in Karnataka and 30.7% students in Telangana believe that post the program their English language skills have improved. This indicates that there is a connection between the ability to express in a language they consider important for pursuing higher education/better job opportunities and confidence levels (Gurler,2015). It is essential to note that a safe environment is necessary for students to develop and practice life skills in the real world. Students in the focus group discussion point out that they have built a relationship of trust with their peers and with the trainer. Further they reported that the activity-based pedagogy being used makes learning joyful, engaging and gives opportunities to them to participate, express and discuss their ideas. These findings from the focus group discussions conducted are in line with the findings in the report submitted by Educational Initiatives Organisation (2013). The report found that 75% of classrooms that used activity-based pedagogy had a fear free environment, which means no kind of punishments were seen. 27% of classrooms provided fear free environments followed by children's active participation in activities. 13% of classrooms were successful in creating a fear free environment, active participation from children and children accepted their responsibility to learn and involved in activities voluntarily (Educational Initiatives Organisation, 2013).



## CHAPTER 7: RECOMMENDATIONS

This study was interested in understanding the components or features that had led the program to be successful in equipping children with the skills the program has intended/desired to. For this purpose, we used the data obtained from the focus group discussions and interviews conducted with different stakeholders. We found the following practices that are discussed to be contributing majorly to the effectiveness of the program.

1. **Community Engagement:** We observed that the program heads and trainers share a good and cordial relation with parents, the local heads and the SDMC members. The parents are supportive of the program. They cooperate with teachers and schools. They extend the possible support from their end to the trainers to help them conduct class efficiently.
2. **Efficient trainers:** Trainers are self-motivated and believe in achieving the cause. Shared experiences revealed that trainers went out of their way to support children in all possible ways to help them to learn. They did efficiently address challenges that cropped up during the different phases of program implementation.
3. **Follow-up with parents:** Trainers showed a great interest in understanding the process of how each child learns, tried to assess and understand the needs and the learning patterns of the child. They did update the child's progress to parents by visiting their homes regularly and understood parents' concerns/feedback as well. They did follow-up with parents if they found children being irregular or missing classes.
4. **Communication:** Trainers have developed and maintained a cordial relation with their cluster heads. Cluster heads support the trainers with teaching aids, instructional strategies and continue to provide them support in all possible ways. The cluster heads also help trainers address issues in their respective schools when any issues surface. The efficient functioning of trainers and cluster heads has been reflected in students' effective learning.
5. **Teaching practices:** Since the program implementation with children is based on Activity based approach, teachers seem to have come up with creative ideas in implementing, resulting in interesting classes for students. Teachers customize the content based on the contextual learning experiences with which students make learning more effective as well as to cater to the students' learning levels.

This section of the report draws attention towards areas the program has potential to improve and recommends how such improvements can be made in engaging students in life skill development. The challenges and recommendations are identified based on the findings and evidence gathered from the evaluation of the Skill in Village program. 4 improvement areas are identified- program structure, program implementation, assessment and evaluation, development of Professional Capabilities of trainers in engaging children in Life Skills Development.

## Improvement Areas

- 1. Program structure** - In the program an attempt is made to integrate life skills development through teaching English language using activity-based pedagogy. However, the program needs a structured input in engaging students in development of life skills. The curriculum developed for the program needs to have explicit inputs on life skills. To design structured inputs - objectives, goals and aims of the life skills modules need to be identified. Age-appropriate learning experiences and instructional resources need to be designed. Further age-appropriate skill specific objectives, goals and aims need to be developed to systematically engage students in learning. Following the curriculum developed - content and activities aiming at developing each skill needs to be developed.
- 2. Program delivery** - Although the delivery of content on life skill development is integrated with English language there is a need to focus on delivering structured inputs for life skill development. Each session needs to consist of elements on life skills and students need to be given opportunities to practice and reflect on them on a regular basis.
- 3. Assessments and Evaluation** -There is a need for structured evaluation frameworks and assessment tools to assess life skills among students. A structured mechanism to track changes in abilities and life skills of students continuously is required. A framework needs to be developed. The framework needs to contain skills focused on, standards of each skill and age-appropriate indicators to be able to develop assessment tools. The assessment needs to be conducted minimum 2 times to be able to understand the effectiveness of the program, once before and once after the intervention. The range of assessment tools can be developed to validate the data collected and create authentic databases tracking changes observed.
- 4. Development of professional Capabilities** - The trainers in the program receive academic support and in service training in engaging students in learning English. However, there is a need for structured modules equipping teachers in delivering content on skill specific content to students. Teacher workshops focusing exclusively dealing with strategies teachers can engage children in life skill development can be administered. Along with it, practices on integrating English language content with life skills can be focused. This can help teachers to engage students in life skills development more regularly and efficiently.

## REFERENCES

- Abdel-Khalek, A. M. (2016). Introduction to the Psychology of self-esteem. *Nova Science Publishers, Inc.* [https://www.researchgate.net/publication/311440256\\_Introduction\\_to\\_the\\_Psychology\\_of\\_self-esteem](https://www.researchgate.net/publication/311440256_Introduction_to_the_Psychology_of_self-esteem)
- Agnihotri, R. K. (2010). Multilinguality and the teaching of English in India. *English and Foreign Languages Journal*, 1 (1). [https://www.academia.edu/5905884/Multilingualaity\\_and\\_the\\_teaching\\_of\\_English\\_in\\_India](https://www.academia.edu/5905884/Multilingualaity_and_the_teaching_of_English_in_India)
- Antonius, R. (2003). *Interpreting Quantitative Data with SPSS*. London: SAGE Publications Ltd. <https://methods.sagepub.com/book/interpreting-quantitative-data-with-spss>
- Apni Shala. (n.d.). *SEL shala*. Retrieved December 2020, from Apni Shala: <https://www.apnishala.org/sel-shala.html>
- Barrow, R., & Woods, R. (2006). *An Introduction to Philosophy of Education, 4th Edition*. New York: Routledge: Taylor and Francis. <http://tarbiyati.iki.ac.ir/files/tarbiyati.iki.ac.ir/An%20Introduction%20to%20Philosophy%20of%20Education%20-%20Barrow%20%26%20Woods.pdf>
- Basso, F. P., & Abrahão, M. H. (2018). Teaching Activities that Develop Learning Self-Regulation. *Educação & Realidade*, 495-512. <https://doi.org/10.1590/2175-623665212>
- Behrani, P. (2016). Implementation aspects of life skills education program in central board of secondary education schools. *International Education & Research Journal*, 2 (3), 68- 71. <http://ierj.in/journal/index.php/ierj/article/view/184/166>
- Bertot, J. C., & McClure, C. (2003). Outcomes Assessment in the Networked Environment: Research Questions, Issues, Considerations, and Moving Forward. *Library trends*, 590- 613. [https://www.researchgate.net/publication/297377240\\_Outcomes\\_Assessment\\_in\\_the\\_Networked\\_Environment\\_Research\\_Questions\\_Issues\\_Considerations\\_and\\_Moving\\_Forward](https://www.researchgate.net/publication/297377240_Outcomes_Assessment_in_the_Networked_Environment_Research_Questions_Issues_Considerations_and_Moving_Forward)
- Bhumi- Speak Out. (2014). *English Speak Out*. Retrieved from Bhumi: <https://www.bhumi.ngo/p/english/>
- Bono, E. d. (1970). *Lateral thinking: creativity step by step*. New York: Harper & Row, Publishers. <https://eric.ed.gov/?id=ED075989>
- Boostrom, R. (1998). Safe Spaces: Reflections On An Educational Metaphor. *Curriculum Studies*, 30 (4), 397-408. <https://www.tandfonline.com/doi/abs/10.1080/002202798183549>
- Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Cambridge: Harvard University Press. [https://khoerulanwarbk.files.wordpress.com/2015/08/urie\\_bronfenbrenner\\_the\\_ecology\\_of\\_human\\_developbokos-z1.pdf](https://khoerulanwarbk.files.wordpress.com/2015/08/urie_bronfenbrenner_the_ecology_of_human_developbokos-z1.pdf)
- Brown, J. D., Keith, A., Cook, D. E., & Cook, K. E. (2010, September). From the top down: Self-esteem and self-evaluation. *Cognition and Emotion*, 615-631. [http://faculty.washington.edu/jdb/articles/Top.pdf?origin=publication\\_detail](http://faculty.washington.edu/jdb/articles/Top.pdf?origin=publication_detail)
- Census of India. (2011). *Language: India, states and union territories*. New Delhi: office of the registrar general. [https://censusindia.gov.in/2011Census/Language\\_MTs.html](https://censusindia.gov.in/2011Census/Language_MTs.html)
- Chance, P. (1986). *Thinking in the classroom: A survey of programs*. New York: Teachers College, Columbia University. <https://eric.ed.gov/?id=ED269235>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*. New York: Routledge Taylor and Francis. <https://gtu.ge/Agro-Lib/RESEARCH%20METHOD%20COHEN%20ok.pdf>
- Colby, A., & Kohlberg, L. (1987). The measurement of moral judgment. *Theoretical foundations and research validation*, 2. <https://www.semanticscholar.org/paper/The-measurement-of-moral-judgment%2C-Vol.-1%3A-and-Vol.-Colby-Kohlberg/2be2a70d4d2b22bece0ddcc504a7262e2a0c5149>

- Cook, T. D., Deng, Y., & Morgano, E. (2007). Friendship Influences During Early Adolescence: The Special Role of Friends' Grade Point Average. *Journal of research on adolescence*, 17 (2), 325-356. Doi: [10.1111/j.1532-7795.2007.00525.x](https://doi.org/10.1111/j.1532-7795.2007.00525.x)
- Coover, G. E., & Murphy, S. T. (2000). The Communicated Self-Exploring the Interaction Between Self and Social Context. *Human Communication Research*, 26 (1), 125-147. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2958.2000.tb00753.x>
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). (P. A. Smith, Ed.) Boston: Pearson Education, Inc.
- Dinesh, R., & Belinda, R. (2014). Importance Of Life Skills Education For Youth. *Indian Journal of Applied Research*, 4 (12), 92-94. [https://www.worldwidejournals.com/indian-journal-of-applied-research-\(IJAR\)/special\\_issues\\_pdf/December\\_2014\\_1418821178\\_30.pdf](https://www.worldwidejournals.com/indian-journal-of-applied-research-(IJAR)/special_issues_pdf/December_2014_1418821178_30.pdf)
- Dream a Dream. (n.d.). *Dream a Dream*. Retrieved December 2020, from Empowering Youth: <https://dreamadream.org/impact>
- Educational Initiatives Organization. (2013). *Evaluation of Activity-Based Learning as a means of Child-Friendly Education – Final Report*. UNICEF.
- Ennis, R. (1992). Critical Thinking: What is it? *Proceedings of the 48th Annual Meeting of The Philosophy of Education Society*, (pp. 27-30). Colorado.
- Fisher, R. (2005). *Teaching Children to Think*. Cheltenham, United Kingdom: Nelson Thornes Ltd.
- Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Geller, V., & Shaver, P. (1976). Cognitive Consequences Of Self-Awareness. *Journal Of Experimental Social Psychology*, 99-108. <https://eric.ed.gov/?id=EJ140572>
- Gibb, G. S. (2012). Organizing an NGO-sponsored English-Medium School in South India: Lessons Learned. *Journal of International Education and Leadership*, 2 (2). <https://files.eric.ed.gov/fulltext/EJ1136040.pdf>
- Glaserfeld, E. V. (1995). Radical Constructivism: A Way of Knowing and Learning. In P. Ernst (Ed.), *Constructing Mathematical Knowledge: Epistemology and Mathematics Education*. (pp. 18-40). London: The Falmer Press. <https://files.eric.ed.gov/fulltext/ED378043.pdf>
- Government of India. (2020). *National Education Policy 2020*. Ministry of Human Resource Development. New Delhi: Government of India. [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Grover, J. (2018). Life Skills Education in India: Initiatives and Challenges. *International Initiative Multidisciplinary Journal*, VI (III), 124-127. <http://www.inventivepublication.com/Documents/20180405190209083.18.%20March-2018.%20Dr.%20Jatinder%20Grover.pdf>
- Gustaman, W. W. (2015). Self Esteem and Their English speaking Competencies. *Journal of English and Education*, 3 (2), 121-137. <https://media.neliti.com/media/publications/192316-EN-the-correlation-between-students-self-es.pdf>
- Holley, L. C., & Steiner, S. (2005). Safe Space: Student Perspectives On Classroom Environment. *Journal Of Social Work Education*, 49-64. [10.5175/JSWE.2005.200300343](https://doi.org/10.5175/JSWE.2005.200300343)
- IGNIS-Inspired Learning. (nd). *IGNIS-Inspired Learning*. Retrieved from We Enjoy Learning: <https://www.igniscareers.com/services/>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage Publications.
- Keshky, M. S., & Samak, Y. A. (2017). The Development of Self Esteem in Children: Systematic Review and Meta-Analysis. *International Journal of Psychology & Behavior Analysis*, 3. <https://www.semanticscholar.org/paper/The-Development-of-Self-Esteem-in-Children%3A-Review-Keshky-Samak/6ac038286e0678059f109549fc5b6435329d0cd5>

- Klayman, J. (1985). Children's Decision Strategies and Their Adaptation to Task Characteristics. *Organizational Behavior and Human Decision Process*, 179-201. [https://doi.org/10.1016/0749-5978\(85\)90034-2](https://doi.org/10.1016/0749-5978(85)90034-2)
- Learning Curve. (N.D.). *Learning Curve Life Skills Foundation*. Retrieved December 2020, From Central Square Foundation :<https://www.Centralsquarefoundation.Org/Learning \ -Curve-Life-Skills-Foundation/>
- Learning Curve. (n.d.). *Learning Curve Life Skills Foundation*. Retrieved from Central Square Foundation:<https://www.centalsquarefoundation.org/learning-curve-life-skills- foundation/>
- Lingren, H. G. (1991, April). Self-Esteem in Children. *Cooperative Extension Service*.
- Magic Bus: Childhood to Livelihood. (n.d.). *What we do? Life skills Education NGO in India*. Retrieved December 2020, from <https://www.magicbus.org/life-skills-education-ngo-in-india.php>
- Mansour, M., & Martin, A. J. (2009). Home, Parents, and Achievement Motivation: A Study of Key Home and Parental Factors that Predict Student Motivation and Engagement. *Australian Educational and Developmental Psychologist*, 26, 111-126. Doi: [10.1375/aedp.26.2.111](https://doi.org/10.1375/aedp.26.2.111)
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. Sage Publications, Inc.
- Meganathan, R. (2011, January). Language policy in education and the role of English in India: From library language to language of empowerment. *Teaching English*, 2-31. [https://www.researchgate.net/publication/304336122\\_Language\\_policy\\_in\\_education\\_and\\_the\\_role\\_of\\_English\\_in\\_India\\_From\\_library\\_language\\_to\\_language\\_of\\_empowerment\\_Ramanujam\\_Meganathan](https://www.researchgate.net/publication/304336122_Language_policy_in_education_and_the_role_of_English_in_India_From_library_language_to_language_of_empowerment_Ramanujam_Meganathan)
- Mehrotra, S., & Panchamukhi, P. R. (2007). Private provision of elementary education in India: findings of a survey in eight states. *Compare: A Journal of Comparative and International Education*, 36 (4), 421-442. <https://doi.org/10.1080/03057920601024883>
- Mentor Together. (n.d.). *Programs of Mentor together*. Retrieved December 2020, from Mentor Together: <https://mentortogether.org/programs/#life-skills>
- Mertes, L. (1991). Thinking and writing. *Middle School Journal*, 24-25. <https://www.tandfonline.com/doi/abs/10.1080/00940771.1991.11496002>
- Montroy, J. J., Bowles, R. P., Skibbe, L. E., McClelland, M. M., & Morrison, F. J. (2016). The development of self-regulation across early childhood. *Developmental Psychology*, 52 (11), 1744 –1762.
- Moradi, S., Faghiharam, B., & Ghasempour, K. (2018, April-June). Relationship Between Group Learning and Interpersonal Skills With Emphasis on the Role of Mediating Emotional Intelligence Among High School Students. *SAGE Publication*, 1-10. <https://doi.org/10.1177/2158244018782734>
- Morin, A. (2011). Self-Awareness Part 1: Definition, Measures, Effects, Functions, And Antecedents. *Social And Personality Psychology Compass*, 807-823. <https://doi.org/10.1111/j.1751-9004.2011.00387.x>
- Navita. (2016). Role of self-esteem in English speaking skills in adolescent learners . *Research Journal of English Language and Literature*, 216-220. <http://www.rjelal.com/4.4.16/216-220%20NAVITA.pdf>
- NCERT. (2011). *Activity Based Learning Tamil Nadu*. New Delhi: NCERT. <http://14.139.60.153/bitstream/123456789/8463/1/Programme%20Evaluation%20Report%20Activity%20Based%20Learning%20Tamil%20Nadu%20NCERT%20D14220.pdf>
- NCF. (2000). *National Curriculum Framework for School Education*. New Delhi: NCERT. <http://ctegujarat.org/Downloads/NCF%20Secondary%20Education-2000.pdf>
- NCF. (2005). *National curriculum framework*. New Delhi: NCERT.
- NCTE. (2009). *National Curriculum Framework for Teacher Education*. National Council for Teacher Education. New Delhi: National Council for Teacher Education. [https://ncte.gov.in/website/PDF/NCFTE\\_2009.pdf](https://ncte.gov.in/website/PDF/NCFTE_2009.pdf)



- Neuman, W. L. (2011). *Social Research Methods: Qualitative and Quantitative Approaches*. (7th, Ed.) Boston: Pearson. <http://letrunghieutvu.yolasite.com/resources/w-lawrence-neuman-social-research-methods-qualitative-and-quantitative-approaches-pearson-education-limited-2013.pdf>
- Patrick, H., Knee, C. R., Canevello, A., & Lonsbary, C. (2007). The role of need fulfillment in relationship functioning and wellbeing: A self-determination theory perspective. *Journal of Personality and Social Psychology*, 92(3), 434–457. [https://www.researchgate.net/publication/6453733\\_The\\_role\\_of\\_need\\_fulfillment\\_in\\_relationship\\_functioning\\_and\\_well-being\\_A\\_self-determination\\_theory\\_perspective\\_Journal\\_of\\_Personality\\_and\\_Social\\_Psychology\\_923\\_434-457](https://www.researchgate.net/publication/6453733_The_role_of_need_fulfillment_in_relationship_functioning_and_well-being_A_self-determination_theory_perspective_Journal_of_Personality_and_Social_Psychology_923_434-457)
- Pattanayak, D. P. (1981). *Language Policy and Programs*. Central Institute of Indian languages Mysore. Ministry of Education and Youth Services Government of India. <http://14.139.60.153/bitstream/123456789/1376/1/Language%20Policy%20and%20Programmes.pdf>
- Pradeep, B. S., Anniappan, B., Ramaiah, A. S., Shahane, S., Garady, L., Arelingaiah, M., et al. (2019). Quality of a life skills training program in Karnataka, India - a quasi-experimental study. *BMC Public Health*. <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-019-6836-8>
- Rajasekaran, W. C., & Anburaj, G. (2015). Ways of Teaching English in Rural Areas. *Journal Of Humanities And Social Science*, 20 (2), 100-102.
- Ramakrishnan, S. (2010, February). *Life skills education in our schools*. Retrieved December 2020, from Teacher Plus: <http://www.teacherplus.org/life-skills-education-in-our-schools/#content>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press. <https://www.jstor.org/stable/j.ctt183pjjh>
- Saraf, A. (2014). Language, Education and Society: Multilingualism in India. *Language and Language Teaching*, 3 (2), 18-21. [https://apfstatic.s3.ap-south-1.amazonaws.com/s3fs-public/Language%2C%20Education%20and%20Society\\_Multilingualism%20in%20India.pdf](https://apfstatic.s3.ap-south-1.amazonaws.com/s3fs-public/Language%2C%20Education%20and%20Society_Multilingualism%20in%20India.pdf)
- Segrin, C., & Taylor, M. (2007, September). Positive interpersonal relationships mediate the association between social skills and psychological well-being. *Personality and Individual Differences*, 43(6), 637-646. [https://www.researchgate.net/publication/229364725\\_Positive\\_interpersonal\\_relationships\\_mediate\\_the\\_association\\_between\\_social\\_skills\\_and\\_psychological\\_well-being](https://www.researchgate.net/publication/229364725_Positive_interpersonal_relationships_mediate_the_association_between_social_skills_and_psychological_well-being)
- Sharma, A. (2020, July). English as a facilitator of social mobility in India. *English Today*, 1-4. <https://www.cambridge.org/core/journals/english-today/article/abs/english-as-a-facilitator-of-social-mobility-in-india/6EFC612E30DE842BBA63306D5CDF14E2>
- Shome, S., Khunyakari, R., Natarajan, C., & Shastri, V. V. (2011). What do students learn from designing and making a playground model? *PATT 25 & CRIPT 8: Perspectives on learning in design and technology education*. Mumbai: TIFR. doi: 10.13140/2.1.4410.8802
- Smail, A. (2013, August). Rediscovering the teacher within Indian child-centered pedagogy: implications for the global Child-Centered Approach. *Compare: A Journal of Comparative and International Education*, 43(4), 613-633. <https://doi.org/10.1080/03057925.2013.817225>
- Solomon, D. M., & Kalaiyaran, M. (2016, January). Importance Of Self-Awareness In Adolescence – A Thematic Research Paper. *Iosr Journal Of Humanities And Social Science*, 19-22. <http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2021%20Issue1/Version-2/D021121922.pdf>
- Sriprakash, A. (2009, September). Joyful Learning' in rural Indian primary schools: an analysis of social control in the context of child-centered discourses. *Compare: A Journal of Comparative and International Education*, 39(4), 629-641. <https://doi.org/10.1080/03057920903125677>
- Suchman, E. A. (1977). Evaluating Educational Programs. In F. G. Cargo (Ed.), *Readings in Evaluation Research* (pp. 40-48). New York: Russell Sage Foundation. <https://www.russellsage.org/sites/default/files/ReadingsEvalRes.pdf>

UNICEF. (2019). *Comprehensive Skills Framework Rights based and life cycle approach to building skills for empowerment*. New Delhi: United Nations Children's Fund India Country Office. <https://www.unicef.org/india/sites/unicef.org.india/files/2020-02/ComprehenSiVe-lifeskills-framework.pdf>

UNICEF. (2019). *Measuring Life Skills In the context of Life Skills and Citizenship Education in the Middle East and North Africa*. Jordan: UNICEF.

Vygotsky, L. S. (1978). *Mind in Society The Development of Higher Psychological Process*. London: Harvard University Press.

Weis, S., & Martin, H. (2005). Social Intelligence-A Review and Critical Discussion of Measurement Concepts. In R. Schulze (Ed.), *Emotional Intelligence An international Handbook* (pp. 203-230). Massachusetts: Hogrefe & Huber Publishers. [https://www.researchgate.net/publication/232560412\\_Social\\_Intelligence\\_A\\_Review\\_and\\_Critical\\_Discussion\\_of\\_Measurement\\_Concepts](https://www.researchgate.net/publication/232560412_Social_Intelligence_A_Review_and_Critical_Discussion_of_Measurement_Concepts)

WHO. (1997). *Programme On Mental Health - Life Skills Education In Schools*. World Health Organisation, Division Of Mental Health And Prevention Of Substance Abuse World Health Organization, Switzerland.

Wicklund, R. A. (1979). The Influence Of Self-Awareness On Human Behavior . *American Scientist* , 187-193. <https://www.jstor.org/stable/27849150>

World Bank. (2017, October 10). *Skills development*. Retrieved December 2020, from The World Bank: <https://www.worldbank.org/en/topic/skillsdevelopment#main>

World Health Organization. (1997). *Life skills education for children and adolescents in schools*. World Health Organization. Switzerland: World Health Organization.

Wubbels, T., Brekelmans, M., pj, B. d., & Tartwijk, J. V. (2006, June). An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. *Handbook of Classroom Management: Research, Practice, and Contemporary Issues*. [https://link.springer.com/chapter/10.1007/978-94-6091-939-8\\_1](https://link.springer.com/chapter/10.1007/978-94-6091-939-8_1)

Zimmerman, B. J. (1999). Attaining Self-Regulation: A Social Cognitive Perspective. In P. Pintrich, M. Boekaerts, & M. Z (Eds.), *Handbook of Self-Regulation* (pp. 13-39). Academic Press. <https://doi.org/10.1016/B978-012109890-2/50031-7>

Yasmin, H., Khalil, S., & Mazhar, R. (2020). Covid 19: Stress management among students and its impact on their effective learning. *International Technology and Education Journal*, 4(2), 65-74.

Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and Lockdown on Mental Health of Children and Adolescents: A Narrative Review with Recommendations. *Psychiatry Research*, 293(113429), 113429. <https://doi.org/10.1016/j.psychres.2020.113429>

Conto, C. A., Akseer, S., Dreesen, T., Kamei, A., Mizunoya, S., & Rigole, A. (2020). COVID-19: Effects of School Closures on Foundational Skills and Promising Practices for Monitoring and Mitigating Learning Loss (Innocenti Working Paper No. 2020-13).UNICEF. <https://www.unicef-irc.org/publications/1144-covid19-effects-of-school-closures-on-foundational-skills-and-promising-practices.html>

United Nations Sustainable Development Group. (2020). Policy Brief: The Impact of COVID-19 on children. *United Nations*. <https://unsdg.un.org/resources/policy-brief-impact-covid-19-children#:~:text=Children%20are%20not%20the%20face,profound%20effect%20on%20their%20wellbeing>.

Mahapatra, A., & Sharma, P. (2020). Education in times of COVID-19 pandemic: Academic stress and its psychosocial impact on children and adolescents in India. *International Journal of Social Psychiatry*, 67(4). <https://doi.org/10.1177/0020764020961801>

OECD. (2020). The impact of COVID-19 on student equity and inclusion: supporting vulnerable students during school closures and school re-openings. *Tackling coronavirus (Covid-19): Contributing*

to a global effort. [https://read.oecd-ilibrary.org/view/?ref=434\\_434914-59wd7ekj29&title=The-impact-of-COVID-19-on-student-equity-and-inclusion](https://read.oecd-ilibrary.org/view/?ref=434_434914-59wd7ekj29&title=The-impact-of-COVID-19-on-student-equity-and-inclusion)

UNICEF India Country Office. (2020). Rapid assessment of learning during school closures in the context of covid. UNICEF. <https://www.unicef.org/india/reports/rapid-assessment-learning-during-school-closures-context-covid-19>





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