

**Art Therapy for the Healing of Tribal Kids with Special Needs
- A Case of Multiple Intelligence in Learning Styles
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Abstract

Healing in the lap of nature is an intuitive insight amidst discourses on the mental health of aboriginals. While the wilderness offers a therapeutic exploration of the tribal mind, socio-political marginalization often impacts the wellbeing of minority groups. Children from indigenous families are most vulnerable to the witnessing of such victimization and isolation. While parents struggle to make ends meet, with drug intake and alcohol addiction - the recipients of frustrated living conditions in harsh geo-social settings, are kids born into tribes. Art having a language of its own allows for this transcendental healing to occur, in a multilingual context of diverse cultural histories. Performance and visual arts offer tremendous potential to mitigate ADHD-related violent tendencies, as well as help adults to abate reactionary behaviors while holding a healing space for differentially-abled minds. Parents of indigenous origins, and teachers from special-needs inclusive schools - involved in the learning processes of adolescents and toddlers from settlements of aborigine - must be equipped with techniques to channel disruptive behavior such as restlessness or rage. The environmental setting offers immense potency to reconfigure the socio-ecological descent of aggression and hyper attenuation. Using environmental sciences as an extra-curricular subject to involve students in interpersonal skills development, assessment was structured to be holistic of varied learning styles and integrative of disciplines.

Key words: Cultural and environmental context, art therapy, learning stylesDiverse learning styles

In a study on tribal livelihoods it is reported that literacy rates decline with increased financial vulnerability within households. 'The household economic condition in children's early ages contributed to 24% of educational wellbeing inequality among tribal and non-tribal children. Further, the education status of male and female adults, and the sanitation condition of families considerably impacted educational wellbeing.' (Rashmi et al., 2022). Tribal folk adapt well with unplanned evictions, long-distance travel by foot across jungles, and cope with a lack of sanitation facilities. But the social costs incurred by girls in missing out on education are as much a problem as the intermittent schooling and dropout rates faced by boys.

The other factor that deters tribal children from gaining inclusion in state-led education programmes is the barrier of language. While South India predominantly has Tamil, Kannada, Telugu and Malayalam in the five southern states as the medium of instruction - oral languages of the tribes share borrowed etymologies from two or three regional languages. Spoken dialects amidst forest dwellers also are void of script, and aren't documented in written form formally. Language connects to learning enhancement as the brain thinks and rationalizes thought in its mother-tongue, embedded with deep cultural value. 'The chasm between policy and practice affecting the place of languages in society, it is argued, leads to educational failure, capability deprivation and poverty in the minority linguistic groups, particularly the tribal mother tongue speakers.' (Mohanty, 2010). Oral histories thus need to be revived and documented to be used as study

material that aboriginals can relate to. Relationships with nature and folk art could strengthen this bridge between dialect and learning as a contextually personalized process and experience.

Tribal folk face a huge challenge in leaping beyond vulnerability as a lived experience. When they migrate in search of a more secure life, better education or altered livelihood choices, they are starkly alienated from the development agenda. At first modernisation seems to be a threat to their existential instincts. In another study it is documented that dialogue and rationale aren't stored in the right brain regions of a human mind. To effectively heal tribal marginalisation in the process of education, it is essential to induct tribal kids in creative expression via arts and crafts. 'Early trauma may lead to deficient hemispheric integration and traumatic memories may be stored in the right hemisphere. Since these traumatic experiences are processed and stored in the right part of the brain that is nonverbal, it makes sense to pay more attention to nonverbal methods of treatment.' (Klorer, 2005). Indulging tribal families that are displaced to revive handicrafts and restore aboriginal identity can be therapeutic for residents of isolated hamlets. It also restores identity in tribal children who are often alienated from their own cultural roots.

The danger of business strategies employed by NGOs that claim to support and safeguard tribal identity and aboriginal value, is that the agenda is monetary - and production is mechanised to suit the fancies of urban artists and elite end-users. Art as therapeutic must be void of demand-gap pressures, and must exist and be explored for one's integration with identity. 'Art interventions allowing for children's self-expression

are more effective' than those that have an adult bias or agenda. 'The art therapist provides the creative

presentation and documenting skills. The essence of this study was to enable creative expression via oral

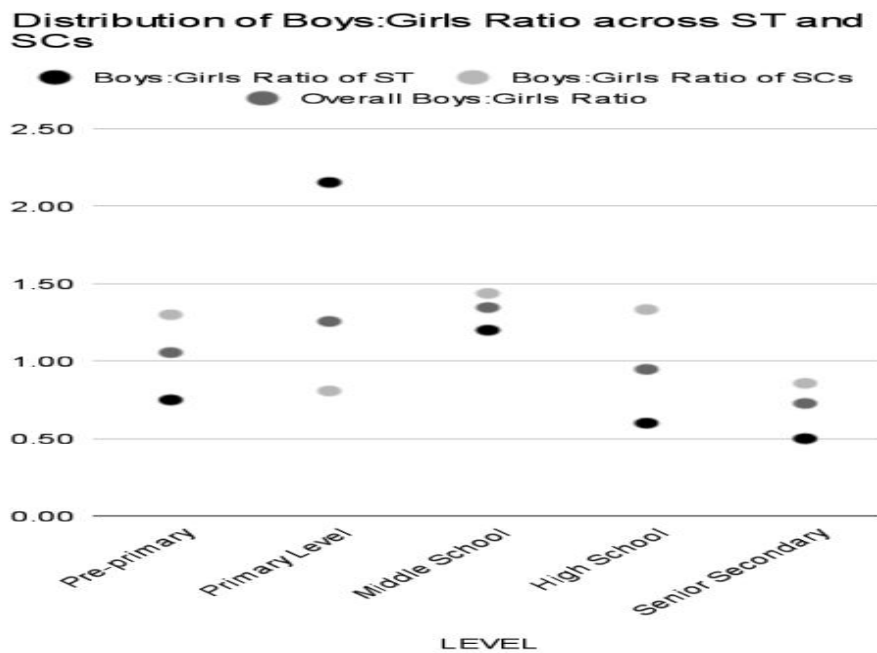


Figure1: Boys to Girls ratio distributed across schooling levels

environment, but the child finds his or her own path.' (Gerteisen, 2008). It is therefore suggested that NGOs allow a more immersive experience for end-users and design-professionals to touch-base with their own instinctual identity while interacting with tribals and in learning their art forms.

While students from tribal families show signs of resilience in coping with harsh realities of caste and class discrimination, those with learning difficulties bear the brunt of adult dissatisfaction. ADHD symptoms are even more pronounced in the young souls that belong to almost-isolated forested landscapes. Though they've lived their lives playing with friends and relatives in the wild, their ability to find strength in regulating hyperactivity is still low. Even those with mild attention deficiency show signs of hyperactivity when amidst peers.

Confronting aggressive traits in juveniles by angry teachers or irritable parents, may not serve as beneficial to both child development and responsiveness by adults to hyperactive characteristics in teenagers. Tribals are wrongly attributed to live a free life in the wild, and it is of much more relevance that their wellness be improved using the landscape available to them. They may not have the access to maintaining mental wellbeing using the environment as a therapeutic medium.

Art having a language of its own allows for this transcendental healing to occur, in a multilingual context of diverse cultural histories. Merging the voice of nature with the linguistics of artistic expression, one can channelize mindfulness. Art as a discipline stretches to design and layout in

communication and report writing, using environmental sciences as an extra-curricular subject to involve students in interpersonal skills development.

Structuring the assessment to be holistic of varied learning styles and integrative of disciplines - environmental studies as a subject - offers great potential for bridging gaps between theory and practice. For this reason, the importance of 360 degree evaluation in collective participation was realized through the process of pedagogical designing of the programme, and incorporation of inclusive teaching methodologies.

At VidyaVanam Senior Secondary School, in Anaikatti - Tamil Nadu, teachers who've graduated from Shantiniketan - West Bengal, engage in art as a language - a medium of instruction, with students from the southern castes and tribes of India. With respect to students the focus of this study was on learning from nature, while for adults the modules engaged in expression through the medium of arts and crafts to channel conscious interaction amidst both parties. While parents showed a lack of interest in investing in art-based healing, teachers acknowledged the value it had on their day-to-day interactions with students.

The region of study selected was the bordering village of Tamil Nadu, sharing interstate boundaries with Kerala. Anaikatti is famous for wild elephant sightings, and the school chosen to complete this research is VidyaVanam Senior Secondary School.

The various castes and tribes included in an educational opportunity provided by the school with

the support of the Tamil Nadu Government - Department of Education, Central Board of Secondary Education (CBSE) and National Institute of Open Schooling (NIOS): are Irula, Backward Castes (BCs), Minority Backward Castes (MBCs) and SCs such as Sakaliyer, Parayer. BCs include Vakaliga, Coundar. Minorities include Kurumba, Valayer.

Scheduled Tribes mainly include JenuKurumbas and Irulas in the geographic area. The school has a considerable balance in including minority castes and tribes into the education facility provided by a privately-run, international NGO funded organisation. Intake of tribal boys at the primary level peaks to a high, compared to the boy-to-girl ratio across other grade categories concerning tribes.

The pickup and drop points on either side of the Kerala - Tamil Nadu border are listed below, stretching as far as 15km on each side. The school is located very close to the interstate boundary, amidst the hills of the Anaikatti Reserved Forests, just off the highway where checkposts and the village market exist. Many tribal hamlets are benefitted from this free learning opportunity provided under Right To Education Act and Policy. Mid-day meals supported by local governance are also provided to students, which include nutritious snacks, a health-drink and substantial lunch.

The school buses enroute through the interstate borders, picks up and drops almost all kids each day. Of the remaining, a few children walk from the proximate villages, others get dropped by their family members. The list of stops scheduled are mapped on Google Maps and major villages were located across both states.

Table 1: List of Pickup / Drop points of the school bus routes in Kerala and Tamil Nadu

Tamil Nadu Route	Kerala Route
Bethany Hospital	Kalanpudur
Aalamamedu	Kottathara
Kondanur	Vattalakki
Mangarai	Mattathukadu
Ramanathapuram	Kottathara
	Chavadiyur
	Pattimalam
	Agali
	Goolikkadavu

	Pudur
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There were other remote stops that weren't available through satellite data, and needs ground-truthing by a local representative who is well traversed.

The stops in the Tamil Nadu transect are many more and are confined to the highway route up to the suburbs of Coimbatore. The Kerala route has two state highways diverging amidst remote hills that the tribes walk down to gain access to the school transport facility.

One such village closest to the school that hosts around 55 houses is Thekkalur. With many teachers from SC and ST backgrounds residing in this village, and many children from the village commuting by walking to school daily - the festivities of this village are brought to school during cultural events. During the season of Aadi (Tamil festival to mark the onset of rains) a feast was held after laying roads with 'Sagni' - a mixture of cow dung, turmeric and cow urine. The temple was painted and cleaned to appease the lords. New clothes were bought and worn to mark the occasion of a major lunar shift after the 'Amavasya' (new moon).

The people in the village have resorted to colloquialization of their cultural dialects to Tamil, the regional language of the state. With Malayalam also being a dominant language amidst the tribes that have migrated from Kerala, a mixture of pluralistic linguistics is agreed upon in their daily conversations.

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h differently - given the border, river and hill disputes that the two states had over generations of invasion, conquest and rule. 'The same time as hierarchical multilingualism has led to a general loss of linguistic diversity, the progressive domain shrinkage and the marginalization of the surviving indigenous and minority languages affect the dynamics of the relationship between languages and linguistic groups in contact and negotiation of linguistic identities.' (Mohanty, 2010). It has similarly been noted in the area of study that tribals have an inferiority complex while communicating in broken Tamil with those of SCs.

In normalizing their inability to be fluent in an unfamiliar modernised version of Tamil, performances and street-plays are ice-breakers in dissolving lingual superiority and ego clashes amidst

Art as therapy is subconsciously practiced by the crafts, painting and sculpting teachers from Shantiniketan. Being Bengali, one doesn't understand Tamil, another manages to convey the gist of

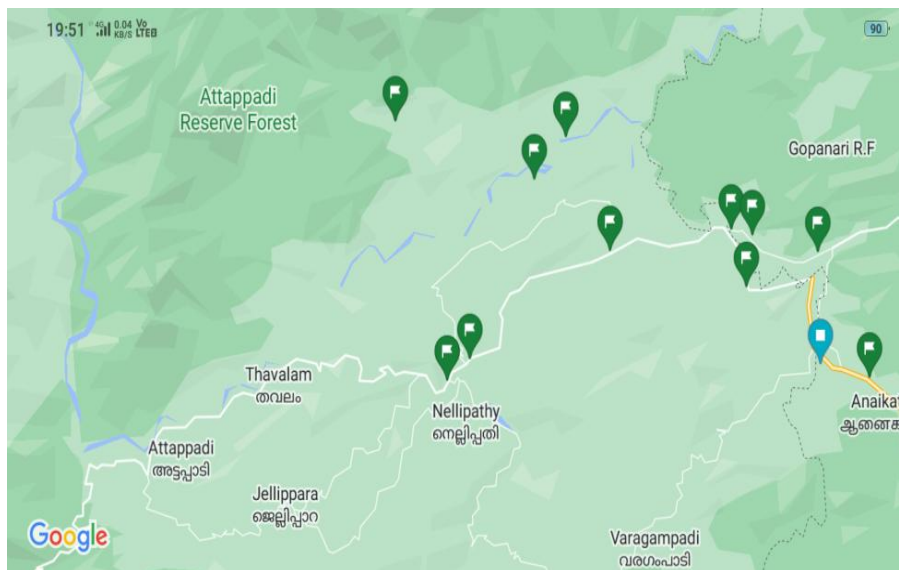


Figure 2: School pickup and drop points around the Western Ghats - Kerala

caste-tribe interdynamics. 'Art-based therapies are complex interventions that combine psychotherapeutic techniques with activities aimed at promoting creative expression.' (Venkit et al., 2016) A social science teacher from the school provides tutorial services post school hours to a mixed culture

instructions in English with the help of students who translate it to Tamil. The senior most of them all truly practices therapeutic art and craft making processes by designing a conducive environment for children of all age groups to explore.

Art therapy workshops in the urban setting have been

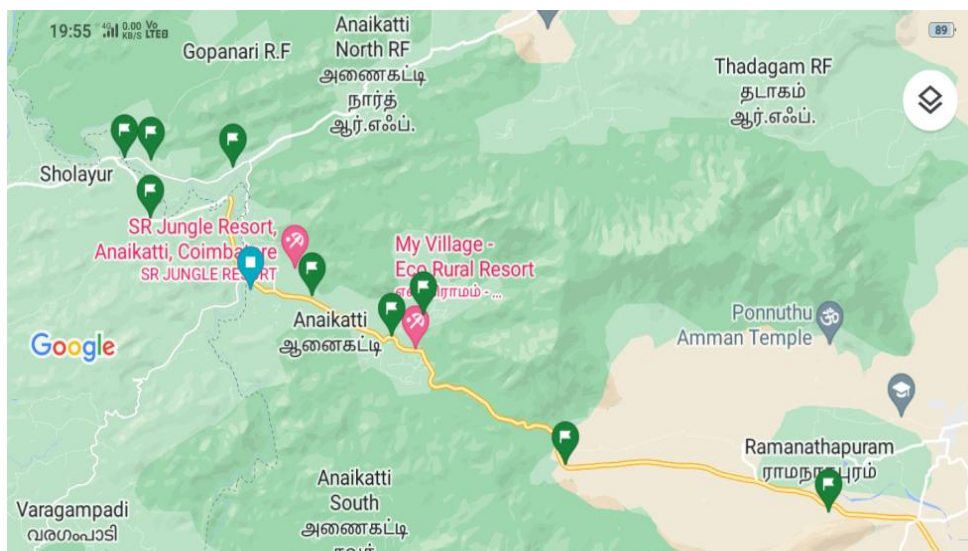


Figure 3: School pickup and drop points around the Western Ghats - Tamil Nadu

of students at the village panchayat hall, irrespective of whether they are from the school he teaches at. His dedication and equality in treating education as a universal right are commendable. His classes allow for artistic and verbal communication of the opinion of students, both in the classroom and under the Tamarind tree of the village.

explorative in involving the participant in knowing a deeper sense of the self. The paint runs through the nerves and flows onto canvas in a subconscious state of the mind. Images are manifested in a trance-like-being, and the awakened self doubts his / her own subdued creativity. 'The creative process is used to facilitate self-expression within a specific therapeutic

framework, the aesthetic form is used to 'contain' and give meaning to the patient's experience, the artistic manifesting an unexplainable piece of work at times, where the artist is caught awestruck by their own

Table 2: Culturally sensitive and ecologically sound curricular framework for tribal education

Thematic Area of Focus	Scope of Subject / Discipline	Skills Addressed / Modalities Covered
SOCIAL / CULTURAL	Social - studies as a bridge to explore one's familial past and role in society History as a means of anchoring in traditional wisdom Geography as a mode of understanding one's positionality / placing in terms of availing resource access and effective use Civics sense to rationalize duty / responsibility and right in conserving and managing resources	Socializing via role plays and theater Narrative building exercises towards essay writing Historical analysis of ancestral folklore Story-telling strengthening emotive use of language and expression Geographical sense of space and mapping of resources Spatio-temporal analysis of trends in access to / availability of - resources
LIVELIHOODS SUSTENANCE LINKED	Skill-driven hands-on training in aspects of traditional means of earning / living, in alignment with sustainability in resource-use and conserving forest landscapes	Math and computer skills alongside presentation / reporting Sustainable livelihoods framework contextual to tribes
ENVIRONMENTAL / ECOLOGICAL / NATURAL	Pure sciences bridging need for effective resource utilization strategies Principles in Physics pertaining to water harvesting, land-use linked to climate and weather Chemistry of industrialized farming as against organic / rainfed agriculture using local bio-geo-climatic conditions Biology of sustainable practices and conservation efforts linked to ecosystem services and NTFP usage	Renewable resources and biogeochemical cycles The nature of principles of Nature Earth-centric design and innovative practices Gobar-gas as case-study Bio-farming techniques Ecological principles and functioning Model-making and science-exhibits Indigenous knowledge specific projects
MIGRATION DISTRESS & VULNERABILITY RELATED	Equipping via handicraft and cultural expression - a mitigation to migrating, building resilience in living in the jungle. e.g. Ecotourism	Informed choice in aspiring towards rural / urban lifestyles Building capabilities within forested zones to ensure use-rights are reclaimed

medium is used as a bridge to verbal dialogue and insight-based psychological development, and the aim is to enable the patient to experience him/herself differently and develop new ways of relating to others.' (National Collaborating Centre for Mental Health, 2009). Exploring art as therapeutic with children is far more challenging, and at the same time - easier, than with adults wired into logic. The non-judgmental, color-dissociative true explanation of one's art can only be told by the artist who engages in its production. Time investment translates into

creativity. In the tribal setting, since the medium of art is more organic and related to nature, their hesitancy with the use of chemical dyes is but natural. Getting them to handle the paper and scissors at a young age is challenging for the teacher, if safety instructions aren't conveyed clearly. While apparel fashion, embroidery and stitching come naturally to girls who observe their mothers at home; it is tough for boys to explore arts as a discipline. It then becomes difficult

for boys to undergo art therapy as art doesn't come organically to their interests.

Method

Using the Learning Style Inventory, the modes of learning that children predominantly adopt were distributed, i.e., a combination of - or unimodal, visually inclined, perceptive to audio cues, and responding to activity-based methods of engaged learning. Visual - Auditory - Kinesthetic / Tactile (VAK) scoring was used to predict the most effective proportion distribution of a learner cohort that aligns with the assessment framework designed towards multiple intelligence. The score percentages across single, dual and multi-modal learning styles were evaluated to design an environmental education curriculum as an extracurricular activity standardized for the 9th and 11th graders. Their maximum VAK value would indicate dominant teaching methodologies that would integrate choice of electives for example, with the syllabus of environmental science designed towards balancing theory with off-classroom engagement.

A performance index was developed to assess their basic and acquired understandings of environmental science over a year-long induction period. The pedagogy used to deliver concepts in ecological and social studies was informed by their learning style preference, and the curriculum was consolidated contextually to their cultural roots and knowledge of nature based on their diverse family settings.

Environmental Education as an Interdisciplinary subject to develop Multiple Intelligence

In order to foster learning through multiple

intervention are qualitatively generalized below, collating descriptive data-points from initial student interactions.

Changes in modalities of learning were evaluated post terms one and two, over the course of inducting an environmental education programme for the high school and senior secondary level.

The theoretical aspects of the assessment were covered through 30% internal tests and 70% external exams each term. These totalled to 50% of the marks.

- a. Theory involved an auditory mode of learning, and addressed Verbal and Writing Skills. This was categorized as understanding and comprehension. The internal evaluation of this section was through public speech and conceptual written assignments that relied on listening skills.
- b. Theorizing also included tasks of envisioning and visualizing that were internally evaluated based on presentation and board/chart-work. The focus of this section was mind-mapping and integrating learning across fields of knowledge. Applying one's learnings to conceptualizing one's vision was tested here through problem solving capabilities.

The students' familial background of culture and wilderness living in remote hamlets were used to develop the syllabus on environmental studies. The teaching methodology was activity-based, balanced with comprehension, understanding and application of concepts to real-life scenarios.

The practical section was individually designed and tailored to group students of diverse learning styles,

Table 3: Boy to Girl Ratios across student categories and schooling levels

LEVEL	Boys:Girls Ratio of ST students	Boys:Girls Ratio of SC, MBC and BC students	Overall Boys:Girls Ratio
Pre-primary	0.75	1.30	1.06
Primary Level	2.15	0.81	1.26
Middle School	1.20	1.44	1.35
High School	0.60	1.33	0.95
Senior Secondary	0.50	0.86	0.73

intelligence (MI), the study adopted environmental sciences as a field of discourse to connect learnings from varied disciplines, and to consolidate theoretical understanding into practical application of knowledge frameworks in resolving issues of real-time concern.

The knowledge framework chart was developed keeping in mind core subjects, electives and diverse learning strategies across disciplines.

The blueprint formats for assessment are developed based on the learning style inventory results. The test results that inform understanding prior to the learning

so that shared learning and interpersonal dynamics are explored. The grading was subjective and spanned across stakeholders in the community such as teaching and non-teaching staff, peer-assessment and core-committee inputs towards improving the team project. Vocational training skills were emphasized while students collaborated in a choice-based project design and implementation strategy that had multifold lessons to offer to the cohort of students, the team of teachers and the school management committee as a whole.

The standardized syllabus at the high school level was downscaled to middle school, and a prerequisite standard was set for the senior secondary grades too. This method of back-tracing allowed for clarity on the purpose or intent of introducing interdisciplinarity as extra-curricula and a mapping of the cultural context of adolescents into familiarized learning for the younger students.

Teacher Vulnerability and Wellbeing through Art-Therapeutics

It is important for teachers' wellness to be focused

Art-induced Gratification of Wellness for Non-teaching Staff

Support staff are underpaid, understaffed and overworked in any organisation. They are taken for granted and expected to come on weekends as well as government holidays. They arrive before employees and leave after all have left. Their families remain neglected as their choicelessness toils away into excessive labor each day.

From serving meals, to keeping workspaces tidy, toilets clean and kitchens free of dirt - a school

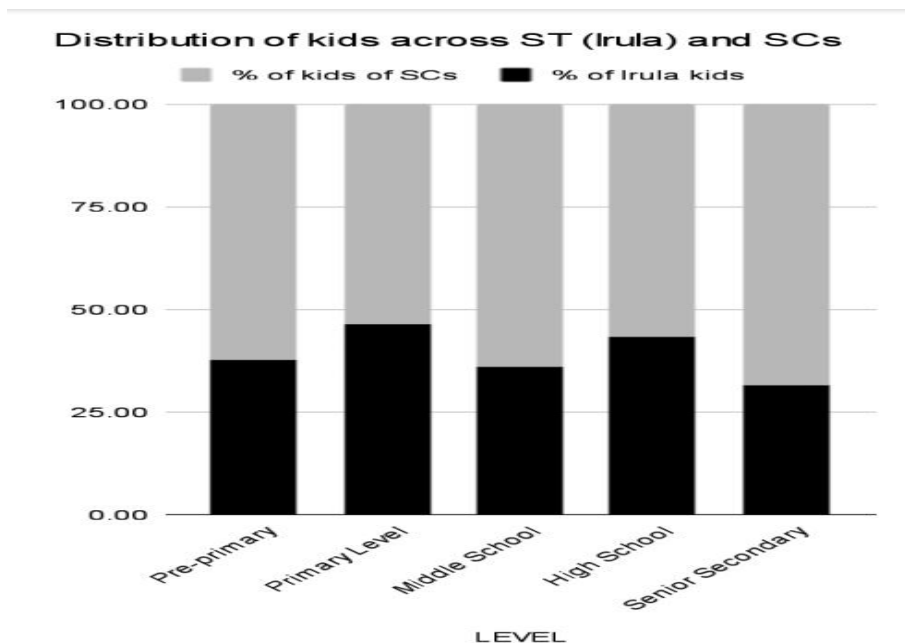


Figure 4: Percent Distribution of Student Strength across caste / tribe at different schooling levels

upon in order to be able to transcend a healthy learning space for children. Teachers need to introspect on their inner marginalized experiences to resolve any vulnerability within. Only then can they truly acknowledge and work beyond the vulnerabilities of kids from minority groups like SCs and STs.

Group therapeutics offer vision-building exercises so that teachers practice nonviolent communication. Teachers undergo personal development workshops to resolve any discord amidst colleagues and tangentially align with the true purpose of education. Creating a safe space for being true to one's feelings offers adults to own their past childhood and to be aware of patterns that project an unresolved inner child in adult behavior.

Adults who are conscious of their own apprehensions in their upbringing make responsive and empathetic teachers who are able to steer a healthy child development pathway for the kids they interact with. Thus, it is of even more significance that the mental health of teachers is taken into consideration while promoting inclusive learning for marginalized societal groups.

operates on the sole efforts put in by the working class who are responsible for housekeeping. Thus, their wellness is most affected by an unempathetic work culture that is busy in educating children without bridging value systems associated on humanitarian grounds for giving gratitude to the labor class.

In a hierarchical and negligent system - true inclusivity starts in how we treat our maids, workforce and drivers. To cope with marginalisation at work, non-teaching staff form informal bonds and groups to survive the chaos of exhaustion and extractive labor. Their resilience is strongest in the face of exclusion and their commitment to work is commendable in times of sickness and stress.

Results

Irula tribes show preference to primary education for their boys, whereas learning for girls is prioritized at the pre-primary, senior-high and secondary levels. The overall Boy:Girl ratio is stable at nursery and high school levels, but shows a deficit of boys in senior-secondary grades. Close to 50% of kids are predominantly from tribal

poverty in tribal families, making boys fend for their parents at an earlier age by engaging in labor. While the culture and ethos of the school are rooted in festivities and traditions of the local populace, the grandiosity of such events are celebrated each year through performing arts for the larger audience to gain visibility of the social works of the partner-NGO:

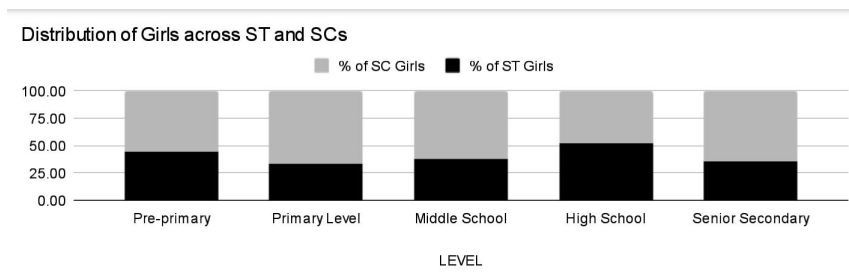


Figure 5: Distribution of strength of girls across scheduled castes and tribes

families identifying as Irula, in the Primary and High-School levels. Environmental Science, Agriculture, Automotive, Computer Science, Home Science, Tourism, Apparel and Food Processing are some of the subjects offered through NIOS and CBSE as a part of the skill-building initiative.

Applied knowledge is tested in practice through a hands-on experience of their learning mechanisms, embedded with body-kinesthetics alongside the multiple intelligence framework designed and inbuilt into the thematic curriculum each year across grades. For some terms it is 'butterfly', and for higher grades in the same term it is decided to be 'water'. Lessons across subjects are planned around the theme of the session and executed to build collective cognition that integrates disciplinary understanding with shared connections.

For example, agriculture as a subject and farming as an activity, feed into farm machinery learned in automotive, or processing of foods to enhance shelf-life. Students also learn about the ill-effects of inorganic farming on health, water and soil.

In the previous section, a graph depicting the boy:girl ratios across grade categories suggests a spike in the number of ST boys at the primary level that includes standards one through five. The following charts signify that ST female-child literacy and school admission is prioritized at the secondary and kindergarten levels of education. It also suggests that the percent of boys across SC and ST categories almost equal the overall percentage of intake of male children at the middle school level.

While a drop in the percent of ST girls in primary, middle and senior-high are indicative of more SC girls being included in the Right To Education Act and Policy adopted by the school, their school fees are subsidized rather than providing them with free-of-cost learning facilities.

The percentage of ST boys remains lowest in high to senior secondary levels as there may be dropouts due to vulnerabilities associated with migration and

Bhuvana Foundation.

The CBSE results of 10th grade indicate a correlation in linguistics across Tamil and English, the medium of instruction being mixed - depending on the fluency of the student and teacher in understanding and communicating in both languages.

Table 4: Regression analysis of Scatter Plot of results between Similar Subjects

10th Grade	English	Tamil
Mean	75.35	75.85
SD	9.247452872	11.71560432
	n	26
	RSQ	0.7150940655
	COVAR	88.09171598
	CORREL	0.8456323465

The regression analysis results in natural and social sciences revealed a covariability across both disciplines, suggesting the pedagogical approach to include rationale social norms and civic science into the curricular framework of teaching through a realistic lens of applicability of learning while engaging with the world. It also showcases that thematic planning across disciplines works towards integrated assimilation of knowledge, understanding and comprehension - into practically applying their learnings to solve real-world issues like democratic schooling, environmental protection, conserving natural resources and aesthetic relevance of artistic expression.

Table 5: Regression analysis of Scatter Plot of results between Complementing Subjects

10th Grade	Science	Social Science
Mean	64.15	60.88
SD	10.79144961	8.585228817
	n	26
	RSQ	0.6746653879
	COVAR	73.17159763
	CORREL	0.8213801726

The kids are exposed to regional historical and cultural trips as a part of their academia, and are inducted into bird-watching and conservation of biodiversity in collaboration with the Salim Ali Center for Ornithology and Natural History (SACON). They also partake in organising annual events at the school such as culture programmes, sports day etc.

Table 6: VAK scoring for the student cohort of study

Scores	Visual dominant	Auditory dominant	Tactile dominant
Min	19	16	16
Max	22	24	25
Score variability	2.333333 333	5.75	5.384615 385
n (sample size)	3	9	14

Table 7: Percentage VAK Dominance and percent difference

Dominance	%V score	%A score	%K score
Min	63.33	53.33	53.33
Max	73.33	80.00	83.33
% Difference	10.00	26.67	30.00

Table 8: Learning style dominance amongst students

Learning Style	Count	% dominance
Single-mode		
Observer	1	4.76

Listener	5	23.81
Activity-based	11	52.38
Dual-mode		
Audio-Tactile	2	9.52
Visual-auditory	1	4.76
Visual-Kinesthetic	0	0.00
Multi-learner		
Visuo-audio-body	1	4.76

Table 9: Min-max variance across learning styles

Learning Style	min Score	max Score	SD	n
Single-mode				
Observer		22	NA	1
Listener	18	24	2.28035085	5
Activity-based	21	25	1.221027883	11
Dual-mode				
Audio-Tactile	16	21	2.516611478	3
Visual-auditory	19	21	1.414213562	2
Visual-Kinesthetic				0
Multi-learner				
Visuo-auditory-body		19	NA	1

Discussion

The crux of the issue regarding tribal education lies in a decontextual curriculum applied universally through the state in the name of equal learning opportunity. For marginalized castes and backward communities there needs to be a recontextualization of schooling in alignment with the resources and means of living accessible to the vulnerable groups. Minorities such as the tribal populace are further isolated from access to amenities provided by the government, facing exclusion when they attempt migration as a family unit.

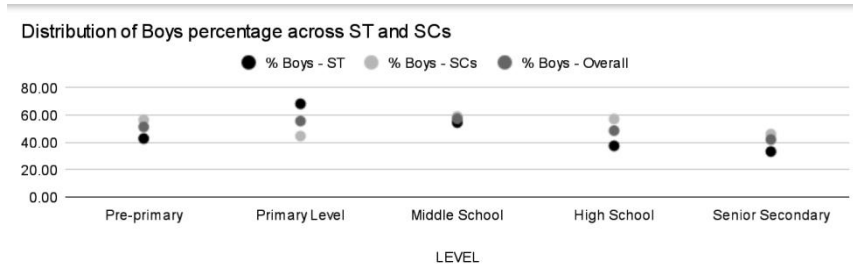


Figure 6: Distribution of overall strength of boys across scheduled castes and tribes

An additional barrier faced by tribes is their unique colloquial language that remains disintegrated from the regional languages of the state. 'Programs of multilingual education are briefly discussed in the context of recent attempts to deal with (the) classroom language disadvantage of tribal children in India.' (Mohanty, 2010).

engage in education. Cultural events serve as a bonding exercise for the school community by including non-teaching and support staff in the learning process backed by a strong value system of inclusion and expression. VidyaVanam Senior Secondary school has prioritized a robust art department and challenged the use of

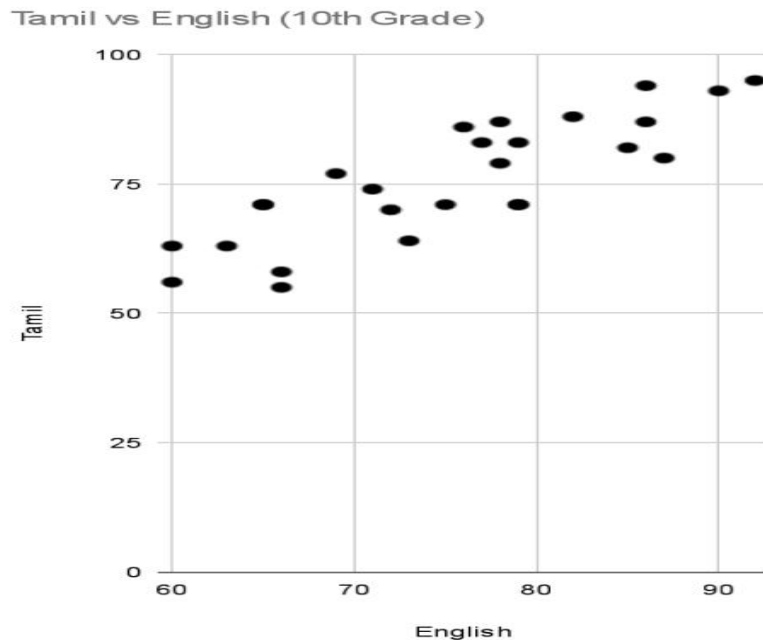


Figure 7: Scatter Plot of Results across Linguistics

Linguistic disadvantages alongside unacknowledged learning difficulties in students leave a cascading gap in the learning faculties, creating a void with respect to skills development. In a study on the inclusion of parental emotions in caregiving to children with learning difficulty, 'core symptoms of ADHD in the children (i.e. hyperactivity, impulsivity, and inattention) often saw improvement while other positive outcomes were noted in various interventions. When directly involved, caretakers experienced benefits too. These sometimes included increased calm, increased self-care, reduced parenting stress, reduced parental overreactivity or relational improvements.' (Potirala, 2020). Art therapy as an intervention works brilliantly in resolving stressed teacher-student dynamics and in building healthy learning environments amidst pupils and adults who

language in artistic development by hiring a team of graduates from Shantiniketan, West Bengal to steer the art programme for children from marginalized societies.

Tribal education in India hasn't been prioritized to serve the contextual needs of children belonging to tribes. The rapidly developing nation has adopted a British pedagogy from its pre-independence rule, and very few schools have returned to an Ashram or Gurukul system of indigenous learning post India's independence. In developed countries there seems to be a further deviation from tribal wisdom and indigenous ways of learning. 'Aboriginal Peoples are facing a number of serious and complex environmental issues within their territories. Post-secondary environmental education programs in Canada have been slow to adopt curriculum and

develop programs to meet the needs of Aboriginal students and their communities.' (Simpson, 2002). Ostracization of the aboriginals seems to dictate the modernisation and development agenda in already

trauma support group was a means of personal growth for participants. Reports from facilitators and participants also suggested a reduction in trauma-related symptoms and an increase in participant use

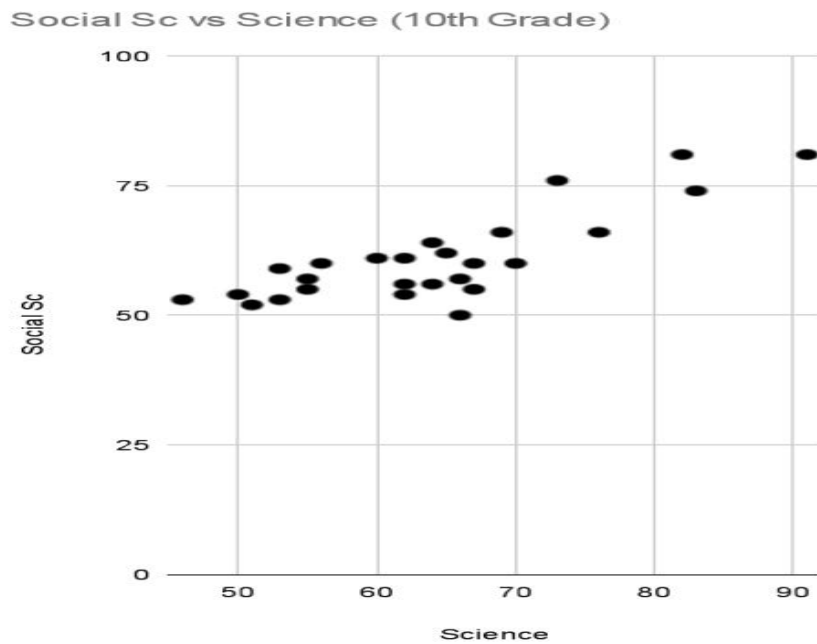


Figure 8: Scatter Plot of Results across Sciences

developed nations. But there is hope in underdeveloped and progressing countries to be inclusive of tribal rights to a contextual learning environment.

Weaving their culture and relationship with nature into the syllabus can foster a safe and conducive classroom setting that encourages cultural expression via relatedness to the ecology and society they live in.

Migration Distress - a subconscious attempt at resolving emotions concerning displacement

Vulnerable communities are often subject to seasonal migrations from their forested home lands in search of jobs and access to amenities offered by the government. Most tribal hamlets are unaware of the schemes and incentives made available to them towards uplifting their standard of living. They are also unfamiliar with the political framework of including them in the citizenship agenda, with many still facing challenges in making Aadhar cards, ration cards and electoral IDs.

At the school, the support staff, teachers, parents and students are a nestled family that gains support in aspects such as difficulty in procuring identity proofs to avail facilities provided by the local government. 'Shram-Dhaan' or service as a motto helps build strong relations amongst members, facilitating a collective responsibility in sharing the process of social integration.

In a profound study on applying art-therapy and peer-support group-therapy, 'mandala creation enhanced the Seeking Safety content, language barriers impacted the potential for implementation, and the

of safe coping skills as a result of group participation.' (Ely et al., 2017).

At VidyaVanam, peer counselling and support group therapy are informally organised to build a sense of inclusiveness amidst external marginalizations. Self-help grouping, especially among non-teaching staff, was strongly felt in their balancing of task ownership when one takes leave, ensuring smooth functioning of house-keeping at the school premises.

This dedication in adults holding a space for effective learning allows for children to be accountable in building a student committee that takes care of the needs of kids who feel left-out in the interpersonal dynamics of the school.

From the collated questionnaires of the Learning Styles Inventory, the following tables were configured to hypothesize the most effectively distributed proportion of learning styles, based on which the assessment criteria were developed.

It was found from the above tabulation that tactile skill sets are to be focused upon to enhance learning output from the particular cohort of students who learnt mainly through tasks involving hand-eye coordination. It was also observed that variability in visual and kinesthetic scores was far less than that of auditory mode of learning. Less variance in learning through 'seeing' and 'doing' were the tenets of designing classroom activities involving observed-action.

While auditory, visual and tactile skills governed choice of subjects such as performing arts, financial numerics and across the fields of social sciences,

body movement and motor skill development dominated decisions to pursue disciplines like fitness, mechanics and programming. Food processing and farming were other scopes of exploring hand-eye coordination alongside listening to industrial instructions. The attention span of students in a learning module that involved them to listen - faded with time, when compared to making them watch short films or taking them out to observe farming practices. Their learning was qualitatively assessed to peak when it involved action-tasks that required body movement.

Interpreting Findings

The distribution of learning styles amidst other grade cohorts could similarly be interpreted to design a pedagogical approach that involves multiple intelligence. Lesson plans could include multimodal learning techniques with activities that balance tactile involvement with audio-visual engagement.

Including and prioritizing hand-eye coordination skills through performance arts alongside visual artistic expression can foster all round development of skills necessary at the various level gradients. Providing a diverse set of electives enables skill reinforcement unique to a child's interests in academics and passions of extra-curricular nature. The decision-making capability of each student is tested to maximize learning performance without bringing in lethargy into work output.

The VAK score guides students to take informed choices regarding elective subjects. It further helps teachers design assessment criteria that are student-specific and learner style centric.

The minimum and maximum scoring across the learning modality categories informs teachers on the preferential learning style of each student compared to the class cohort. Qualitative grading can then dictate the unique contributions of each child to the shared learning experience. Group tasks ensure contributive roles to be balanced across three categories: thinkers / intellects / planners, intuitors / feelers / empaths, and actionators / risk-takers / doers. Each type represents a role in the team and strengthens interpersonal bonding towards shared responsibility of a group's outcome. Sensors are unique in identifying the path of least resistance in collaborative working, while intellectuals plan the most logical approach to problem solving. Action takers take charge of doing the needful in arriving at the issue to be addressed and resolved.

Suggestive Framework

Alongside an interdisciplinary framework that consolidates learnings across subjects, a robust counselling and peer-support strategy both for kids and adults - paves the way towards inclusive and holistic education. Linking culture and nature to syllabi offers a contextualized knowledge content that students from marginalized backgrounds can relate with. Evaluating the VAK score suggests varied learning styles across student cohorts towards an

informed pedagogy and curricular design that meets the diverse interests and learning needs of the grade level.

Workshops and professional development programs offer parents and teachers an opportunity to engage in paving a wholesome learning experience for children, which accommodates the vulnerabilities associated with migration.

'Parental-Insightfulness-Drama-Therapy (PIDT) that was adapted and used with parents of children with ADHD, is a short-term group intervention that uses the power of drama to enhance parents' ability to see things from the child's point of view and gain a better relationship with their child. The opportunity to explore the parents' relationship with the child from a playful stance allowed the group participants to have a significant and diverse experience that does not ignore the objective complexity of what they deal with, and at the same time invites them to experience parenting itself as a creative and vivid act.' (Sela et al., 2019). Modules that bridge discords in parental and teacher understandings of each child's needs are therapeutic in bringing awareness amongst adults of concepts like multiple intelligence.

Using folklore relating to the raw experience of ancestry, one can channel practice linked with theory in gaining skills to be rooted in one's identity. 'In seeking otherwise possibilities for Black childhoods in environmental education contexts, we turn to Black speculative fiction as a creative and generative mode of imagining fugitive educational spaces for young Black children.' (Nxumalo et al., 2019). Similarly, in the context of tribes of India, the scope for inclusive and contextual learning lies in reestablishing their connection with nature and culture.

Qualitative assessment and child-specific design of learning modules, alongside choice in electives, offers an integrative environment for linking theory to practice. Preferences in learning styles and decision to pursue a unique skill development programme must be democratic to the extent of accommodating individual freewill in selecting electives towards unique career pursuits.

Conclusion

A robust platform for nondominant artistic expression allows room for intuition to guide one's pathway in academia. 'The intense tactile experience of working with clay allows the therapist to work through early attachment issues, developmental setbacks and traumatic events with the client in a primarily nonverbal way using a body-focused approach. The kinaesthetic motor action of the hands combined with sensory perception can lead to a profound sense of resolution with lasting therapeutic benefits.' (Elbrecht, 2012). Sharpening the senses beyond rational thought governs right choices made by students with the sensory faculties developed for accountability and responsiveness in learning.

Providing a space of wellness creates manifestations of great potency, in both children and adults.

'Creativity and human well-being – especially the well-being of Indigenous peoples – can be seen as having a long and productive relationship that holds tremendous promise for addressing persistent health inequities between communities and populations.' (Muirhead, 2013). Creative expression is of utmost importance in addressing mental health amongst teachers from tribal and nontribal families - in engaging with learning for minority castes and tribes. To include marginalized communities in quality education, one must discover and explore art therapeutics in the illogical subconscious victimized state of alleviate beyond vulnerability and minoritization.

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