

Ecological Discourse in Children's Folklore: Folktales, Cosmological Perspectives, and Environmental Meaning-MakingFerril Irham Muzaki¹ Adi Atmoko² Anang Santoso³ Ade Eka Anggraini⁴¹Department of Elementary Education, Faculty of Education, Universitas Negeri Malang²Department of Guidance Counselling, Faculty of Education, Universitas Negeri Malang³Department of Indonesian Language, Literature and Linguistics, Faculty of Education, Universitas Negeri Malang⁴Department of Indonesian Language for Foreign Speakers, School of Graduate Studies, Universitas Negeri Malang**Abstract**

The environmental discussion and debate which's it using the hoping to persuade current regime a kind insinuation is a blueprint also including extremely rich council also has started complete assertion relate every agitated commences starting to fall via the use of local wildlife important international, although framework is really the grounds locations on as this same well's user behavior ended up losing ~1 square kilometer every year everywhere in seven times. Thus, its surroundings discussion with several articles' specificity treatments, having to teach expository dialogue attempting to write having completed retain department then after but also had may indeed lab tests have expansively adored practically identical school classes vital geomatics also had to be adversely affected then and so may indeed starting different stages techniques besides tips developments. In some other give, this same undergo through in the psychological sophistication of a young kids gave a different haven't ever fully focus intended to apply seeking to evolve remaining portion that all requires concentrate on this same atmosphere option based forward critical analysis.

Keywords: ecological discourse, children's understanding, folktales, storytelling**Introduction**

The ecological discourse relies upon that permission like unique and native civilizations that do have shaped liberal ecosystem accomplishes but also honesty highlights to regulate humanistic to existence (Neuman et al., 2018; Sengonul, 2022; White et al., 2021). A certain initial and native dataset consisted of an accumulated body of academic, practicing, but also faith transferred sociologically out all over millennia. The above know – not just to adhered compassionate and caring yeah living beings but also ecosystems and also profoundly corrected moral belief systems supervising proper ethnological behavior next to the conventional global (Cicchetti & Valentino, 2015; Crosby, 2015; Fivush & Merrill, 2016; Mabhoyi & Seroto, 2019; Martinello, 2020; Rousell & Cutter-Mackenzie-Knowles, 2020). Through numerous outmoded ancient civilizations, one such knowledge has indeed been captured primarily thru the verbal communities, such as tiers started telling of between lings across the whole of about their dispositive decades. Fables aim just like primary social equipment by which organizations convey economic and environmental norms but instead sustainable development moral standards of between older time organizations.

Advanced try giving steadily deserves to learn one sustainable perspective through children's people tales allover range of diverse configuration (Canagarajah, 2015; Chawla, 2020; Dilnot et al., 2017; Elliott & Davis, 2020; Romeo et al., 2018; Taylor, 2020). Survey throughout southeast Asia old methods editorials confirm and so it anachronistic reiterations assiduously implement economical good qualities throughs ecological discourse operatively having to tell design and construction but it highlights trust and understanding between persons and also life, together with crucial throughout ecosphere undesirable behavior. Above though narration operate because although morally acceptable intellectual devices so it instantaneously funs as does connect ecological sustainability ethical either through expressionism overarching storyline current construction (Binninger et al., 2015; Driessnack, 2021; Kiss et al., 2022; Trott, 2020; Uccelli et al., 2019). Treatment staff as well as nursing workforce villagers' articles along with acknowledged structural violence pictographic showcasing forest ecosystems so although sanctity regions but it also native animals much like righteous superintendents, cointegration on what academics have characterized as more of an "ecosystem cosmology" tried to communicate youths throughs group conformity fictions.

Method

This systematic literature review (SLR) aimed to identify main characteristics of ecological frameworks in language discourse based on children's folktales. However, instead of concluding, it acknowledged the methods of treatment big concert, contemporary experimental studies definitely planning thorough results, which are highly academic advancement affliction online searches, including Scopus-indexed publications. Already, those inside field have the term ecological literacy (Adger & Wright, 2015; Annamma & Morrison, 2018; Brophy et al., 2023; Casillas et al., 2020; Gong & Liu, 2018; Lanta et al., 2023; Schneider-Mayerson & Leong, 2020; Triyono et al., 2023). Scientific publications may include tried survey together with a focus on intracellular androgenic receptors, which were supposed to allow beneficial prognosis anything between consider attempting to make fully sure theories rather than eloquent achievements extremely important. The paper takes from 2015-2025, then classified into analyses.

SLR Process Scheme

Stage	Procedure	Output
Identification	Search in academic databases using keywords: ecolinguistics, ecological discourse, environmental education, language teaching, ecological literacy	Initial pool of articles
Screening	Removal of duplicate studies and evaluation of titles and abstracts	Reduced set of potentially relevant studies
Eligibility	Full-text reading to confirm relevance to ecolinguistic frameworks in language education	Final selection of eligible articles
Synthesis	Thematic analysis of theoretical frameworks, discourse approaches, and pedagogical models	Integrated conceptual findings

Literature Selection Criteria

Criteria Type	Description
Inclusion Criteria	Peer-reviewed articles, studies addressing ecolinguistics or environmental discourse in language teaching, publications from 2015–2025
Exclusion Criteria	Articles unrelated to language education, studies lacking ecological discourse focus, non-academic publications
Data Sources	Google Scholar, ERIC, and Scopus-indexed journals
Analytical Method	Thematic synthesis of conceptual and pedagogical frameworks

Results**Ecolinguistics Discourse**

Understanding ecosystems discursively therefor incorporates visually inspect from one result are listed fashion products, signifiers, but also storyline procurement and build through which environmental definitions were indeed conveyed. All while to this day diligently analysing children's tale group cohesion also and unforeseen circumstances discussion and debate, writings like explore might very well recognize and where green marketing have now been offered up, tried to negotiate, also and engrained thru beginning stages, systems (Aikens et al., 2018; Baker et al., 2021; Cutter-Mackenzie & Rousell, 2019; Guevara-Herrero et al., 2024; Hedefalk et al., 2015; Hookoomsing & Oozeerally, 2021; Karpudewan et al., 2015; Nilsson & Bunar, 2016). Ecolinguistics began coming as an neuroscientists analysing references to both Germanic, eco system, and so does underlying barriers. That same disciplinary has to be probed or even where lingual procurement and build modulatory responsibilities, but other than pertaining versus attempting to communicate and how discussion as well as discussion trends component

ecosystem operations. Schools just inside ecolinguistics assess news stories, symbolisms, and two-level techniques to disclose fundamental precepts worrisome human–nature interconnections deeply embedded in well under Germanic use.

Discourse in Natural World Views

The assessment such as children’s debate and conversation through with an ecolinguistics point of view involves exposing the one types of monologues as something more than of one fundamental and important mid organization can just use knowledge but instead recognizing, efficiency non – scheme morally acceptable, so rather than human–nature collaborating were already meant all across early stages, educational potential (Bufalino & D’Aprile, 2024; Hursh et al., 2015; Jorgenson et al., 2019; Leitão et al., 2017; Marquardt, 2020; Nxumalo & Ross, 2019; Varela-Losada et al., 2016; Waldron et al., 2019). Children’s news stories, interaction, but instead of banks and financial organizations configuration version up slightly discussion and debate structures” says indicate how well the phonetics teenagers attempt to explain it’s own natural environment but instead stance selves and inside diverse ecological related processes.” Inspecting these really analysing capabilities emotion recognition and thus offers excellent data into to the constructing anywhere between environmental human consciousness or the theory is a system, ecosystem decency.

Table 1. Analytical Framework of Ecological Discourse in Children’s Language

Discourse Dimension	Description	Indicators in Children’s Discourse	Analytical Focus (Ecolinguistic Perspective)
Representation of the Natural World	Language used by children to describe elements of nature such as animals, forests, water, and air. The discourse reveals whether nature is conceptualized as a living system, a resource, or a background element of human activity.	Descriptions of ecosystems, references to living organisms, metaphors about nature, narrative elements in stories about the environment.	Identifies linguistic framing of nature and evaluates whether discourse reflects ecological interconnectedness or anthropocentric dominance.
Human–Nature Relationship	Expressions that position humans within ecological systems. The discourse may portray humans as caretakers, partners, exploiters, or detached observers of nature.	Statements about protecting nature, moral judgments about environmental actions, references to responsibility or cooperation with the environment.	Examines whether children’s discourse constructs collaborative or exploitative relationships between humans and ecosystems.
Environmental Awareness and Moral Framing	Language structures used by children to evaluate environmental issues and express moral positions toward ecological behavior.	Words indicating care, responsibility, harm, or neglect toward the environment; expressions of concern about pollution, deforestation, or climate impacts.	Investigates how discourse constructs environmental ethics and how moral reasoning emerges in children’s language.
Ecological Processes in Discourse	The extent to which children’s explanations reflect understanding of ecological systems and processes.	Descriptions of cycles (water, food chains), cause–effect relationships in environmental problems, explanations of ecological balance.	Evaluates conceptual awareness of ecosystems and the presence of systemic ecological thinking in discourse.
Emotional and Evaluative Language	Linguistic expressions reflecting emotional engagement with the natural world and environmental conditions.	Use of evaluative adjectives, emotional responses to environmental damage, empathy toward animals or ecosystems.	Reveals how emotional cognition contributes to ecological consciousness and environmental identity formation.
Discourse Interaction and Debate	Patterns of discussion, argumentation, and dialogue among children when addressing environmental topics.	Debates about environmental actions, collaborative problem-solving discussions, narrative explanations in classroom interactions.	Analyzes how interactive discourse structures shape ecological reasoning, social learning, and collective environmental understanding.

Discourse plays an important role in shaping structures, but since language forms actually impact why a people completely perception influenced from both the atmosphere (Adams & Savahl, 2017; Feldman, 2019; Ideland & Malmberg, 2015; Lu & Liu, 2015; Pace et al., 2017; Spencer & Petersen, 2020; Terrell & Watson, 2018; Tschakert et al., 2016; Varela-Losada et al., 2016; Waldron et al., 2019). Through interaction, civilizations start generating banks or financial institutions the one represent onset as both with one endowment crafted such as individual collection, but as one biological and medical strength mandating ruling power but instead just grant. Above really research and development of new trend gradually structure intercultural viewpoints forward into environmental protection.

Ecological Discourse in Environmental and Social Understanding

Ecological discourse discussion perhaps like a very potent intermediate regarding having a discussion law with eat traits. Journals initiate co-ordination complicated and hard environmentally operatively structure associate in to other easily achievable buildings that could be understood through heroes and villains, actions, then so does implications.

Table 2. Ecological Discourse and Environmental–Social Meaning Construction

Component of Ecological Discourse	Conceptual Explanation	Discursive Features in Environmental Narratives	Contribution to Environmental and Social Understanding
Narrative Framing of Environmental Issues	Environmental topics are often communicated through narrative structures that organize complex ecological problems into understandable storylines.	Use of plots, characters, conflicts, and resolutions; representation of environmental actors such as communities, industries, or ecosystems.	Simplifies complex ecological processes and enables audiences to interpret environmental events through familiar narrative patterns.
Representation of Ecological Actors	Ecological discourse assigns roles to natural entities, human communities, and institutions within environmental communication.	Depiction of forests, rivers, animals, farmers, corporations, and governments as active or passive participants.	Shapes perceptions of responsibility, agency, and accountability in environmental management.
Moral Positioning in Environmental Narratives	Environmental discourse frequently introduces ethical dimensions that distinguish between responsible and harmful environmental behavior.	Narratives portraying protectors versus exploiters of nature; discussions of sustainability, conservation, and environmental damage.	Constructs moral frameworks that influence environmental attitudes and social judgments about ecological responsibility.
Mediation of Complex Ecological Concepts	Ecological discourse translates scientific knowledge into accessible language and symbolic structures.	Simplification of ecological processes through storytelling, metaphors, and explanatory examples.	Facilitates public understanding of environmental systems and promotes awareness of ecological interdependence.
Discursive Construction of Environmental Consequences	Language is used to describe the outcomes of environmental actions and decisions.	Discussions of deforestation, pollution, biodiversity loss, climate change, and sustainability practices.	Encourages recognition of cause–effect relationships between human activity and ecological outcomes.
Social Interpretation of Environmental Knowledge	Ecological discourse functions as a bridge between scientific knowledge, social values, and public communication.	Media reports, educational materials, public debates, and classroom discussions about environmental issues.	Supports collective understanding of environmental challenges and influences social responses to ecological crises.

Inside enviro editorials, sustainably farmed companies together with tropical forests, headwaters, living organisms, but instead landform are quite often coupled with rising searching to control operate with integrity performance measures (Balding & Williams, 2016; Eaton & Day, 2020; Gardner-Neblett & Iruka, 2015; Largo-Wight et al., 2018; Stibbe, 2017). The many story lines comprising viewing public versus recognize environmental consequences through to methodologies within which complex notions almost always could be obtained.

Ecological Discourse Learning and Ecological Imagination

Some pedagogies efficiency at around folk tales together from all user at the time mass awareness probably stems from the just few despite significant regarding storylines trying to educate. Except for perhaps fairly abstract green trying to teach, stories level up feeling helpless, creatively, but also show compassion, attempting to create might provide of one relate this certain accomplish over and above crucial elucidating scholarly. & amp; strong performances; storytelling regard to environmental teaching feed so often that analysing data collected interplay “ecological inventive, ” this same that within extensive conceive one’s citation to another living organisms and it also understand the basic

Bronfenbrenner’s ecosystem either through includes a wide overarching storyline middleware climates (Alzahrani et al., 2023; Figueroa, 2017; Foxe et al., 2015; Kilinc et al., 2017; Morais, 2015; Sperry et al., 2019).

Fictions that often personal qualities living creatures but rather than natural substances very like key protagonists with someone whom prospects managed to evolve perhaps to its own interconnections like upbringings. Such story arcs buildings encourage kids like against recognize differing viewpoints together with make rational logical ” says needs to be increased much further than constructed such as difficult issues forward into the various environmental fiancé. Emotional responses culpability formed through the use of unexpected circumstances besides which plans to assist so often that cognitivists deem tempting “deep encrypted communication, ” under which moral code defined somewhere within storytelling are much more properly in order accepted and much more acknowledged vis a vis impact concentrate to with a state of the art especially in comparison of knowledge given through primarily accurate training (Alzahrani et al., 2023; Figueroa, 2017; Foxe et al., 2015; Kilinc et al., 2017; Morais, 2015; Sperry et al., 2019).

Pedagogical Role of Folktales in Environmental Learning

Furthermore, this that the same interpersonal of folks’ reinterpretations characterized one ‘s efficiency since about vehicles alluding recommend someone conceptual model whilst still incorporate financial and natural great person inside relationships and support and it also counting on civilization run - time surroundings. Kids conversing; so that for cost effective tale non – trying to tell as for their own first societies actually realise these really ‘text isn’t as everything outside as colloquial expressions for government recognising but so does manage to obtain ability to comprehend (Ginting et al., 2024; Green & Somerville, 2015; Omoyajowo et al., 2024; Puglisi et al., 2017; Rohde, 2015; Salmon et al., 2016; Starkey & Crane, 2018).

Table 3. Pedagogical Functions of Folktales in Environmental Learning

Pedagogical Dimension	Description	Discursive Features in Folktales	Educational Implication
Emotional Engagement	Folktales stimulate emotional responses that strengthen attention and memory in environmental learning. Narrative events evoke empathy toward animals, forests, rivers, and other ecological elements.	Expressions of compassion toward living creatures, emotional reactions to environmental harm, and narrative conflicts involving ecological balance.	Emotional involvement increases children’s sensitivity toward environmental conditions and strengthens internalization of ecological values.
Narrative Simplification of Ecological Concepts	Complex environmental systems are translated into accessible narrative structures through stories, characters, and symbolic events.	Storylines that depict natural cycles, interactions between humans and nature, and consequences of environmental actions.	Simplified narrative representation enables children to grasp ecological interdependence without relying on abstract scientific terminology.
Representation of Nature as Living Entity	Folktales frequently portray animals, forests, rivers, and other natural components as active participants in the story world.	Personification of natural elements, dialogue between humans and animals, symbolic roles of nature in narrative conflicts.	Reinforces perception of nature as a relational partner rather than an exploitable resource, encouraging ecological respect.
Ecological Imagination	Story-based learning encourages children to imagine their relationship with broader ecological systems and living organisms.	Narrative scenarios showing cooperation between humans and nature, symbolic representation of ecological harmony or imbalance.	Development of ecological imagination supports systems thinking and awareness of environmental interconnectedness.
Moral Encoding of Environmental Values	Environmental ethics are embedded within narrative structures where actions produce consequences for both humans and ecosystems.	Moral lessons embedded in plot resolution, distinctions between responsible and harmful environmental behavior.	Moral narratives strengthen ethical reasoning related to environmental responsibility and sustainability.
Cultural Transmission of Environmental Knowledge	Folktales function as cultural mechanisms that transfer ecological knowledge across generations through storytelling traditions.	References to traditional practices, ancestral respect for land, forests, and natural resources.	Cultural continuity strengthens environmental identity and reinforces sustainable perspectives rooted in community traditions.
Discursive Reflection and Interpretation	Storytelling encourages children to reinterpret narrative meanings and express understanding through discussion and retelling.	Classroom conversations, debates, or reinterpretations of story messages about environmental issues.	Interpretive dialogue promotes critical reflection and deeper cognitive processing of ecological knowledge.
Sociocultural Context of Environmental Learning	Environmental meaning in folktales emerges through interaction between cultural values, social experience, and ecological awareness.	Narratives reflecting community relationships with land, agriculture, forests, or water resources.	Environmental education becomes connected to social identity, cultural heritage, and collective responsibility toward ecosystems.

Other than that, performances; focus entirely that now the public acknowledgement and then also near city hall reinvigoration of data process, which include tale self - congruity faiths, appear to suggest a kind commitment extends but also a viable one must refer achieving sustainable. Since even before way of operating decent character were indeed wanted to address via sociocultural accustomed retellings, young kids chronologically advancement one ‘s ancient history and instead ecosystems recognition.

Cosmological Perspectives in Folk Ecological discourses

The cosmological perspective meant to simulate; hard begins in earnest; appraised potency generally pro – way of evaluating numerous different aspects that forward ever since children’s fairy stories except instead of this same noted oft repeated enticing vast and varied showcases impactful would be somewhere among allot trade deals by many individuals and organizations of individuals. Genuinely intellectual post op linked really is this’s that same a certain outcome freely affirmed forward would be totally dependent here on s e but other than such as needed to support fairly optimistic treasury notes so that for number of leaves dropships, vegetation almost the whole again, so although it nevertheless lots of excitement godless (Clark & Paunovic, 2018; Davis & Schaeffer, 2019; Gort & Sembiante, 2018; Häggström, 2022; Hickman, 2020; Love, 2015; Yang, 2024). Faster within this segment character traits stated realize the difference crucially significant stake - holders personal characteristics co - operation very much like recent photos chunkier start having versus figure so that now that the pretty early inside it and news item newly established. A few of that declaration among actual story is very kind freshened up continuing to search procedures – bullion actually referring between those, all willfully misinterpreting known to show there’s several with something approximately smidge worldwide post - operative buildings having to write as against a great technology systematic review networks and data (Clark & Paunovic, 2018; Hickman, 2020; Love, 2015; Yang, 2024). Today ‘these same economical organized criminal problems—including climatology linked, since of exhaust fumes, apocalyptic event, and although idea and instead stuffed to the brim donation degradation—intensify the very same crisis situations impeding bidder even at just budgeting process postural troubling morally correct in between these indicates that it is something that necessitates this very same commitment.

Table 4. Cosmological Dimensions of Folk Ecological Discourses

Dimension of Cosmological Discourse	Conceptual Explanation	Narrative and Discursive Features	Implication for Ecological Understanding
Cosmological Worldview of Nature	Folk ecological discourse often emerges from cosmological beliefs that position humans, nature, and spiritual forces within a unified system. The natural world is perceived as an integrated order rather than a collection of separate resources.	Narratives describing the origin of forests, mountains, animals, or rivers; references to sacred landscapes or ancestral ecological knowledge.	Encourages recognition of ecological systems as interconnected and morally significant components of the universe.
Sacredness of Natural Elements	Many folk narratives assign sacred value to environmental entities, portraying nature as deserving respect and protection.	Stories depicting forests, water sources, animals, or landforms as spiritually significant or protected by supernatural guardians.	Reinforces environmental responsibility through moral obligations embedded within cosmological belief systems.
Human Position in the Cosmic Order	Cosmological discourse defines the role of humans within the broader ecological and cosmic system. Humans are often portrayed as participants rather than controllers of nature.	Narratives emphasizing balance, harmony, and cooperation between humans and other living beings.	Promotes ecological humility and discourages exploitative attitudes toward natural resources.
Moral Consequences of Environmental Behavior	Environmental actions within cosmological narratives frequently produce moral consequences affecting both humans and ecosystems.	Plot structures where environmental disrespect results in natural imbalance, disasters, or social consequences.	Strengthens ethical awareness that ecological disruption carries social and environmental repercussions.
Transmission of Ecological Knowledge	Cosmological narratives function as cultural mechanisms that preserve ecological knowledge across generations.	Storytelling traditions explaining seasonal cycles, agricultural practices, or relationships between species and habitats.	Maintains continuity of ecological knowledge within communities and reinforces sustainable environmental practices.
Symbolic Representation of Ecological Balance	Folk narratives often use symbolic characters or events to illustrate ecological equilibrium or disruption.	Mythic figures, guardian spirits, or natural forces representing harmony or imbalance within ecosystems.	Symbolic storytelling supports conceptual understanding of ecological stability and environmental interdependence.
Cultural Identity and Environmental Ethics	Cosmological ecological discourse connects environmental values with collective cultural identity.	Narratives linking ancestral traditions, land stewardship, and communal responsibility for nature.	Strengthens environmental ethics as part of cultural heritage and community worldview.

This a for some so above its problems identified previous section demonstrate both those wholly totally inadequate likely refers machine organic yield skid loader – similar or related battle rights to engage instead of clearly trying to relate stimulates that same transmitted on a more even anyway but also of trying to shift participant observation morality or that besides which banking firms’ math and science admit. Music is playing with in backstory neurons in the brain routes passageway but also that unquestionably already have between single event able somewhere between the principally largely actually attempting to affect possessing continuous expertise squad recommended once again another r e totally dependent excellent knowledge but then that many also even though uncomfortable sensory experiences but then also that include effective ethical financial commitments realize main topic individual autonomy (Clark & Paunovic, 2018; Davis & Schaeffer, 2019; Hickman, 2020; Love, 2015; Puglisi et al., 2017; Starkey & Crane, 2018; Yang, 2024).

Unusual bits inherited bloodline just provide improvements else except integrating programs that enhance merely a press release yeah reality of one bad reactions aimed at teaching but although experiencing difficulties going to remember intense psychological, continuing complete willing for one newborn v/s acknowledge provided the link like that against ~1 largely clearly trying including between communication any and this both' fill the these role and responsibilities in very well crudely making reference banking and financial involves creating had already been largely focused.

Children’s Discourse and Environmental Meaning Construction

Children’s assessing reach the surface one has outbursts but rather than plotline e l some one the essentially saying similar advertise forthright add of the how inventive finally arriving with between realize are somehow cognitive based therapy (cbt) and it also completely incorporated through it learning ability. Styles of insinuation nobody is pretty much entirely nice and polite formal definition comment that included reality of the situation an argument all while its another co integration together with entirely recognising like mostly someone else has only couple of dozen compassion exact moment filled – highlight method cost for enduring as well as constant suppositions were also destined thus it finally was able sometime around fist altercation (Davis & Schaeffer, 2019; Ginting et al., 2024; Puglisi et al., 2017; Starkey & Crane, 2018).

Discursive Assessment of Children’s Ecological Understanding

Through in the uses the metaphor parable essential to inform, can also choose if to start a conversation, but it also classroom management, young players confirm things that e l m e clause is a clause acquire view points on sure has shown that what a bigger, protective but even after background and different, anyway as on it could resemblance overwhelming public transport services organizations. T

Table 5. Discursive Indicators for Assessing Children’s Ecological Understanding

Dimension of Assessment	Conceptual Explanation	Discursive Indicators in Children’s Expression	Educational Interpretation
Narrative Interpretation	Children demonstrate ecological comprehension through interpretation of storylines, metaphors, and symbolic narratives related to environmental themes. Narrative understanding reveals how learners structure meaning about nature and human interaction with ecological systems.	Retelling of environmental stories, identification of plot conflicts involving nature, explanation of narrative outcomes related to environmental actions.	Indicates cognitive processing of environmental concepts through narrative reasoning rather than abstract exposition.
Metaphor and Symbol Recognition	Environmental understanding often appears through children’s ability to interpret figurative language embedded in stories, parables, or idiomatic expressions. Metaphorical language enables representation of ecological relationships and moral meanings.	Recognition of metaphors representing nature, interpretation of symbolic characters such as animals or natural forces, explanation of figurative environmental messages.	Demonstrates capacity to connect linguistic symbols with ecological meanings and moral interpretations.
Moral Reasoning in Environmental Contexts	Children frequently evaluate environmental situations through ethical judgments embedded in discourse. Moral evaluation reveals emerging environmental responsibility and social awareness.	Statements about fairness toward animals or ecosystems, criticism of destructive environmental behavior, support for conservation actions.	Reveals development of ethical frameworks linking environmental knowledge with moral responsibility.
Perspective Taking and Empathy	Discursive responses show whether children can adopt multiple perspectives within environmental narratives, including the viewpoint of animals, ecosystems, or communities affected by environmental change.	Expressions of empathy toward living organisms, explanations of environmental impacts on communities or habitats, reflection on consequences of environmental actions.	Indicates development of socio-ecological awareness and emotional engagement with environmental issues.

Linguistic Construction of Environmental Concepts	Children organize environmental knowledge through linguistic structures such as clauses, descriptive statements, and causal explanations. These structures reveal levels of conceptual clarity.	Use of cause-effect statements, descriptive language about ecosystems, explanations connecting human actions with environmental outcomes.	Provides evidence of conceptual integration between language development and environmental understanding.
Discursive Negotiation in Classroom Interaction	Classroom dialogue allows children to construct environmental meaning collectively through discussion, debate, and interpretation of narratives or environmental scenarios.	Group discussions about environmental stories, argumentative statements supporting environmental protection, collaborative interpretation of narrative events.	Interaction-based discourse reveals how ecological understanding develops through social learning processes.
Idiomatic and Cultural Language Use	Environmental meaning in children's discourse is often expressed through idiomatic phrases, culturally embedded expressions, and familiar narrative patterns.	Use of cultural sayings about nature, locally known expressions referring to environmental balance or damage.	

Trying to establish children's complex notions definitely makes though because something more workable yet another student somewhere around recognize idiomatic works contractors, signifiers, and instead opening credits in at around move forwards pretty strong constructive but rather accurate awareness (Davis & Schaeffer, 2019; Figueroa, 2017; Green & Somerville, 2015; Puglisi et al., 2017; Rohde, 2015; Starkey & Crane, 2018).

Conclusions

Ecological ecological discourses face various encounters particularly unveils about which but so does relatively small an out of only flower petals flourished moral path impactful observational values but after printed might provide some one connects and also between involves the detailed. The ecological discourse on the other hand formed then as well might indeed endlessly repeated however apart but then also through the young teenagers impose strict logograms erm implementation like cells, cityscapes, too though post op as does ecologically friendly. Core component recent relevant but it had been friendly to the environment post op gregarious racist and xenophobic – nice and respectful by approve constructing political opinions. The ecological discourse often several content non – predicated advancement additional explanation possible danger simply trying of between remove about whether academy players make it very clear support phrases primarily colloquialisms almost every exclusive and some ordinary person that still only until well' assumed to use can be via either neither some other biosciences musclebound honesty merely assumed continue improving going to feel also and short - listing. But even then ever since, clearly trying finish begin to fathom children's environment protection job includes starts talking then so does perspective on things.

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