Contemporary Prevention Programming Needs of Young Children in Indigenous and Underserved Communities

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Abstract

In September 2021, PAXIS Institute and Coop Consulting collaborated to host a 2-day event with a panel of expert practitioners, respected researchers, and key stakeholders. This group sought to provide recommendations for meeting the needs of young children in indigenous and underserved communities with additional considerations for the impact of the COVID 19 pandemic. This included equipping caregivers and early childhood educators with approaches and strategies to create a more nurturing environment. This also included addressing the unique contemporary challenges faced by young children. The group also provided insight for accessing indigenous and underserved communities.

Keywords: PAX, Prevention, Indigenous

Caregivers, early childhood educators, and others with a stake in the success of young children from indigenous and underserved communities face several contemporary challenges. These include disparities in primary resources, systemic racism, wealth inequities, disparate access to services, and a number of other historical disparities. These barriers have a resounding impact on the physical health, mental health, and lifetime outcomes of the children from those communities.

Stakeholders must combat the effects of historical atrocities at every turn. For example, Bombay et al. (2019) determined that chronic childhood adversity had a multigenerational impacton children who had attended Indian Residential Schools (IRS).IRS were pervasive throughout the American West and Canada from the 1860s through 1990s. Survivors of IRS demonstrated an increased risk of physical, mental, and social health challenges including increased rates of PTSD, substance use disorders, and major depression throughout childhood into adulthood. Additionally, even parental attendance of IRS predicted increased risk for suicidal thoughts and attempts in adolescence and adulthood.

Distal outcomes of mental health disorders and substance misuse in indigenous communities create for a perpetual cycle of use and disorder. Maina, et al. (2020) found that exposure of Indigenous children, ages 7-13 to addictive substances at a young age, often leads to early use of substances and is associated with physical, mental health issues, poor social and relational functioning, and occupational and legal problems. Additionally, early exposure to substance use leads to lifelong polysubstance use. This use causes comorbidity effects that compound the severe impacts on the quality of life for individuals and those within their microsystem.

Polysubstance use has uniquely adverse consequences for indigenous youth and is pervasive throughout indigenous communities. Zuckermen et al. (2019) found that 12% of youth aged 7-12 have used multiple substances. 50% of substance-using youth, report using more than one substance. Males and indigenous students are more likely to report polysubstance use compared to females and non-indigenous students.

Many of these severe circumstances and proximal outcomes have been exacerbated by complications as a result of the COVID 19 pandemic. Scarborough et al. (2020) found that poverty rates of families with young children grew during the Great Recession. These families became even more vulnerable throughout the pandemic. Many lost their employment and experienced stressors associated with lack of childcare and services such as head start that typically support families in need.

According to Sánchez-Cruz, Masinire, & López,(2021), the pandemic has also shown that educational measures to support students appear to be more focused on monolingual learners with limited resources available in languages of the indigenous people. This decline in available services and increase in those in need compounds already existing structural, social, health, and economic inequities. There are steps that stakeholders can take in order to address these historical and contextual disparities. Kohl and Hopkins (2020) describe policy changes that can benefit indigenous students. Some of those identified policies are comprised of teaching twenty-first century competencies provided in alocally relevant context.

This also involves including indigenous Elders in the learning process and engaging teacher education institutions to work closely with local indigenous communities to address locally relevant sustainability issues. Addressing pre-service teacher preparation allows indigenous knowledge keepers to teach from the indigenous perspective.

Indigenous children can benefit from intentional approaches. Gerlach and Gignach (2019) found that engagement with families who have experienced social marginalization is enhanced when early childhood staff interactions are focused on respect, understanding, and responding to parents' self-identified concerns, priorities, and needs rather than a sole focus on their child's early learning and development. Engaging in these strategies with marginalized indigenous populations is the first step to maximize program potentials and mitigate effects of adversity on young children's life journey.

Thoughtful dispositions are vital to successful engagement and implementation with indigenous children. Wright et al. (2019) found that mothers identify effective practitioners as those providing incentives and home visit supports in order to improve access to services and promote engagement. Additionally, holistic care that encompassed a wrap-around approach and long-term relationship building improved outcomes. Furthermore, practitioners of indigenous-led services are best suited to deliver services to the indigenous population.

Okeefe et al. (2021) detailed a process for gaining indigenous children's support and cooperation during the pandemic using story books. They found the books provide culturally appropriate illustrations that are representative of indigenous values, strengths, and perseverance. The books depict an indigenous family addressing COVID19 precautions, and stories include a mother (nurse), father (tribal leader), twin daughters, and a grandmother (Elder). The storybooks described traditional messaging to include the grandmother representing a cultural keeper/Elder who teaches the twins about traditions through acts of service, respect, and responsibility. The books use an indigenous strength-based approach to provide health promotion resources while referencing indigenous values, which contributes to intergenerational strengths and wellness.

Ultimately, caregivers and early childhood educators must be equipped with strategies and approaches rooted in contemporary prevention science and historical cultural wisdom in order to improve lifetime outcomes for children from indigenous communities. This will allow for culturally competent regulation and resilience among indigenous youth. In fact, according to Caqueo-Urízar (2021), resilience is an indirect mediating variable in the relationship between ethnic identity and life satisfaction of young people. Contemporary indigenous youth have balanced life between the culture of their ancestors and the current urban areas. Stakeholders must acknowledge this dichotomy and consider the strengths and needs and of both.

Method

This section describes the data collection protocol and data analysis methods used to examine the discussion group responses. Equivalent qualitative standards for validity and reliability are addressed along with examples of corresponding analysis strategies employed.

Participants

New Mexico Office of Substance Abuse Prevention partnered with Coop Consulting and PAXIS Institute to host the New Mexico Early Childhood Symposium, gathering participants from key knowledge and experience communities. The Symposium was held on September 10-11, 2021, with early childhood practitioners attending on Day 1 (3 hours), and Researchers and Stakeholders on Day 2 (5 hours). The Day 1 discussion group totaled 21 participants; Day 2 totaled 15 participants. As will be discussed in the *Analysis* section, both discussion groups exceeded the typical size of a Focus Group although retained many of the other hallmarks of that methodology.

Facilitation

Facilitation continuity with one facilitator across both discussion groups was effective in maintaining similar discussion introduction/purpose, pacing, summary, and closing. The facilitator also provided ample time each day for participants to each introduce themselves and to answer the following question: "What is it about your experience that gives you purpose in being here today?" Providing each participant time to address this question created a safer space in which the discussion dialogue could begin. It may have had a leveling effect for participants to hear similarity in overall purpose and aims, regardless of differences that could impede participant interaction.

Research Design

Key in documenting the data analysis process is first identifying and justifying the data collection protocol employed. It is important to understand that certain practicalities made it necessary to engage in what would be informally called methodological "bricolage" in the qualitative research world (Levi-Strauss, 1968). This approach of methodologically making do with whatever is at hand to complete a job, is not without precedent and fits squarely within the realm of constructivism.

As stated in the *Participants* section, the number of individuals contributing on either day exceeded the typical 8 to 10 members that make up a functioning focus group (Krueger & Casey, 2000; Patton, 2002). Additionally, in meeting the funder's request, the discussions were not recorded, so a true transcription from which direct quotes could be taken was not available. Such quotes routinely become a significant part of a focus group report and assist in meeting qualitative criteria for credibility. Yet, what transpired over those two days does ring true in the general spirit of focus group intent: the focus group has been defined as "a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment" (Krueger & Casey, 2000, p.5). Clearly, the symposium meets the threshold of well-planned, perception gathering, and non-threatening based on the level of participation that each day's activities garnered.

Focus groups share features with other forms of group discussion in that they utilize a clear plan for a controlled process and environment in which interaction will take place, there is a structured process to collect and interpret data and participants are selected based on shared characteristics. These other forms include group interviews (Patton, 2002; Parameswaran, 2001), Town Hall Focus Groups (Zukerman-Parker & Shank, 2008), and semi-structured and structured group interviews (Fontana & Frey, 1994; Corbin & Strauss, 2008). Within these approaches the following elements most closely align themselves with the characteristics of the New Mexico Early Childhood Symposium discussion groups: Group interviewing with its conversational emphasis and ability to create safety in numbers, semi-structured interviewing with pre-set but still flexible interview guide questions, and Town Hall Focus Groups utilizing larger numbers of participants. Based on the unique data gathering factors in play during the symposium, elements of group interviewing, and focus groups were combined to create a distinctive, practical approach for understanding and analyzing the discussion data: truly, using what was there to get the job done (Mambrol, 2016).

Finally, notes were taken in a summary format and noted by participant wherever possible. Notetaker continuity was maintained across both discussion groups.

Analysis

With the goal of developing a symposium summary report that would help inform future programming, research and policy for young people in New Mexico, a strategy for data analysis was employed that would most directly and potently extract key themes from the discussion group data while adhering to criteria of trustworthiness which will be discussed further in the *Methodological Integrity* section. Qualitative analysis with a basic three-stage process for coding was used as it is a standard and accepted method used in all the focus group and group discussion approaches discussed previously in the *Research Design* section. Qualitative analysis was ideal for compiling findings from the discussions because it allows for analysis of participant voices and to look for patterns within dialogue data.

Memoing entailed an initial reading of all the data. For the purposes of the discussion groups, the notes for Day 1 and Day 2 were read and coded as one document. General ideas, impressions, notes about outlier commentary, and possible categories were noted in the right-hand margin of the document.

Once memoing had concluded, coding began with two complete readings of the documents. Codes were three to four words and or letters and numbers attached to these words and listed on a coding guide along with definitions for codes requiring them. Coding is a process of immersing oneself in the data and developing codes that relate to the research questions or objectives (Patton, 2002), in this case, the five questions stated previously in the *Executive Summary*. In a sense, it is describing what is being observed in the data. It is also important to be sensitive to themes that may diverge from those questions or represent outlier or contrary points of view.

Finally, to complete this process, basic codes (basic themes) were clustered to create both Organizing Themes and Global Themes that aid in showing hierarchies and relationships between themes (Attride-Sterling, 2001). "Basic Themes are simple premises characteristic of the data…Organizing Themes organize Basic Themes into clusters of similar issues…Global Themes are super-ordinate themes that encompass the principal metaphors in the data as a whole…it is a concluding or final tenet" (Attride-Sterling, 2001, p.389). Consultation with a colleague assisted in further pairing down the basic themes list and refining the Organizing Themes.

Methodological Integrity

While lengthier research studies would require in-depth explanation for meeting the qualitative equivalent standards of validity and reliability, the following basic standards criteria were met for the purposes of this qualitative summary report as shown in Table 1.

Table 1*Standards Criteria for Qualitative Inquiry*

Standard	Purpose	As met in summary report
Credibility	Trustworthiness/plausibilityof choice of data analysis framework	Thematic analysis to determine patterns among voices
Dependability	Sufficient information provided that procedural steps could be followed albeit possibly reaching different conclusions	Data Analysis section narrative and supporting appendices
Confirmability	Description of the context in which the study was performed and how this shaped the findings	Coding Guide; Global, Organizing and Basic Themes
Transferability	Description of the context in which the study was performed and how this shaped the findings	Identification of limitations of study (not recorded-no quotes;); Variation (size of discussion groups and mixed nature of interviewing protocol).
Reflexivity	Explanation of how reflexivity was embedded in the study process	Memoing; Coding/Themes; review with additional researcher

With the thematic structure in place as described, this analysis is provided using a typical focus group reporting narrative.

Findings

Qualitative theme analysis revealed multiple organizing themes that linked to five global themes across both New Mexico Early Childhood Symposium discussion groups. Throughout the symposium, participants emphasized the ongoing challenges youth, families and practitioners are facing in New Mexico because of the pandemic, the intensified impact it has had on Indigenous and underserved communities and looking ahead, the opportunities to better address early childhood needs through research, training, and programming.

Global Theme: The Contemporary Needs of Children

Recognizing and Anticipating Early Childhood Pandemic Impacts and Needs

Discussion group participants were asked to speak to the contemporary needs of young people. Many emphasized early childhood developmental needs and SEL/PAX Skills Development. Participants were very specific in identifying the following as having been directly impacted by the pandemic:

- Early Childhood developmental needs: Facial recognition; language development; reduction in free play; rich language development; and fine and gross motor development
- SEL and PAX skills development: Effortful control; learned helplessness; structure, self-regulation; sharing;resolving conflict; delayed gratification

Amongst many respondents, there was agreement that there was a sense of continued reactivity to these impacts, that so much is unexpected with the ongoing pandemic. Recognizing the issues, proactively engaging with these issues and then essentially re-engaging in an anticipatory stance was what many commented on throughout the two days of the symposium.

Sentiments around contemporary needs of children also focused on behaviors developing earlier in children. Of note, this earlier onset of developmentally problematic behaviors was thought to transcend the pandemic and examples of instances were given in both resourced and under resourced homes.

Although technology will be addressed in more depth when discussing screentime pervasiveness later in this report, it is fitting here to mention how agreement developed regarding the need of young children to receive guidance and support in distinguishing the use of technology as a tool compared to its use as a social device as seen in their tendency to mirror technology usage of older children in their environment. Although it seemed to the discussion groups that this had been an issue pre-pandemic, many indicated that this was exacerbated during the pandemic with overall reliance on technology.

Early Childhood Parents Needs

Validating parent experiences and utilizing a "care for parent" model were thematically important considerations for meeting early childhood parents' needs. Across both discussion groups, examples of home visits, interactions with parents or personal stories indicated the importance of meeting parent needs in the moment by joining them as a partner that is in "this together"; essentially "doing with" them instead of "doing to" them. This demonstrates care for parents needs with a view to empowering the parent to meet the child's needs. Equally salient were participant messages regarding the importance of meaningful parent follow-up, continued engagement with parents and the opportunity that a long-term commitment and parent/practitioner relationship offers in shifting to a prevention context. The long-term relationship building was emphasized within Indigenous community contexts.

Other important themes that developed out of participants discussion were the needs of parents of young children aligned with the need for practitioners to increase their skills in asking the right questions in determining parent and child needs and to enterinto conversations not assuming mastery of concepts or program protocols and policy. Successful communication and needs assessment could be enhanced by simply approaching conversations with an assets perspective. Finally, many participants identified the opportunity for strengthening a home/school PAX connection that if properly executed could become an effective parent and student reinforcement mechanism currently absent in many households.

Parents as Prevention/Parents as Agent of Impact

Dovetailing early childhood parent needs in general, participants thematically captured parents in prevention roles with powerful agency to impact their child's positive development trajectory. Frequently, discussion focused on characteristics of parents that successfully meet the needs of young children in building early developmental skills on a pathway leading to self-regulation. Qualities such as honesty with children, being present and engaged in the moment, and noticing "the good" were strategies routinely mentioned. Additionally, there was consensus around behavioral modeling and rehearsal and this concept was repeated in other thematic areas even when not specifically addressing the Early Childhood age group. The ability to practice context appropriate behaviors and to have them demonstrated by trusted, predictable adults seemed to resonate across discussion groups and appeared frequently in data analysis.

Comparable with the "doing with"/ "doing to" concept discussed in the *Early Childhood Parent Needs* section, many participants agreed that parents as agents of prevention acted in a parent/child learner dyad. There was intentionality in the parent joining along with the child in learning activities in the experiential/learning role as well, instead of observer or director. As the parent/child relationship is strengthened, other developmental impact areas discussed in the *Recognizing and Anticipating Early Childhood Pandemic Impacts and Needs*sectionare built or strengthened.

Screentime Pervasiveness

Screentime and technology use by young people thematically developed during data analysis with notable regularity. Although much of the frequent participant discussion regarding technology would begin with its anchor point to older children it was to articulate the bond to early childhood and its implications. Initially important, the point that screentime for young children continues to age-down. Anecdotes regarding this were shared across discussion groups and spanned resourced and under-resourced communities. Repercussions from this earlier usage considered by group members were earlier reliance on immediate gratification, the loss of opportunity to develop basic skillsets, impediment to social interaction development, and screentime becoming the child's primary reinforcer. Also critical to an understanding of the screentime pervasiveness theme is the coalescence of opinion around its impact on family relationships. As younger children engage in lengthier screentime usage, a home dynamic of co-existence may develop. Parents may be very engaged in screentime thereby modeling it and young children may be provided tablets, laptops, etc. to occupy them. This diminishing level of interaction, in turn, sets up conditions whereby young children experience additional barriers to meeting developmental milestones.

Of importance in this discussion regarding screentime was an opposing opinion about the value of screentime and alternatively viewing it as an opportunity for young children. A participant argued that using tablets, laptops, and other devices could be an asset in helping to rebuild skillsets. Furthermore, it could be a likely tool for reminding parents to praise and validate their children, remind children to put down technology for a while and engage in free-play, and other activities.

Global Theme: Unique Needs of Children from Indigenous or Underserved Communities

Early Childhood Indigenous Communities Distinct Voice and Needs

Distinct and unique needs awareness as well as inclusive constituent dialogue in decision making were central themes identified as means in better meeting needs of young children from indigenous communities. A participant emphasized greater effort must be placed on incorporating indigenous voices in all community decision making impacting children, regardless of a community member's perceived "expertise level." The vital point being inclusiveness of indigenous community members in the conversation beyond just a small set of "experts" was respectful and should be understood as a communication norm. Further, the parallel theme of the transformative nature of being able to have the basic choice to participate in programming in the indigenous community was closely tied to the initial decision-making discussion. Some participants discussed historic trauma and lack of choice, and fundamentally, whether community members felt they had the right to express their feeling that they did not indeed need intervention or programming. Not unrelated, a participant indicated that for some indigenous communities, remoteness during the pandemic has made it so that indigenous needs are not even known at this time; determining whether the communities want or need early childhood programming assistance, etc. has not been effective because of technology access issues.

Themes related to community voice, decision making, and choice underscored the themes of indigenous culture and values as educational models, should programming be selected in a community. Participants conveyed a need for indigenous language infusion and cultural values into early childhood programming curricula but maintaining a sensitivity to this in terms of each community's unique history and cultural/linguistic/ethnic characteristics.

While participants found consensus around meeting the needs of Indigenous communities from an asset perspective, it was understood across discussions that in general, many Indigenous communities are experiencing the same early childhood issues and needs just greatly amplified. Dialogue converged around indigenous communities continuing to navigate the obstructive exigencies of discrimination that impact access to resources, quality education, and opportunity. The pandemic magnified this by stretching community resource "safety nets" so that those resources were severely diminished or no longer available.

Global Theme: Challenges posed by the pandemic

Pandemic Hyper-Safety Environment

The pandemic hyper-safety environment thematically developed during data analysis with notable regularity.A strong consensus developed around this organizing theme and its basic themes and these permeated other global theme areas.

Participants strongly agreed on the increase in safety orientation brought on by the pandemic, yet it was also understood that the level of safety vigilance and precaution early childhood parents are engaging in is creating unintended and cascading social, emotional and developmental effects on young children. Many indicated that the pandemic has created an unsafe environment for all and that ultimately, the cascade effect starts with a parent who is stressed effecting the child's behavior which in turn has social, emotional and developmental implications. The universal nature of the "unsafe environment" perception/feeling seemed to demand a multi-leveled and multi-modal response by practitioners, researchers and stakeholders. Some even saw this situation as critical enough to need a community-level response to restore the Nurturing Environment model and to enlist the aid of community members to become more engaged, active, and watchful.

Another need detailed by discussion participants within this theme focused on how safety is resource contextual. The concept of "margin for error" that will be discussed further in *Under-resourced/Underserved Community Needs,* explains the contingencies involved in making decisions when one does not have resources to fall back on and how that impinges on one's safety. The groups expressed a need for those serving these communities to have a heightened awareness going forward for the direct correlations between resources and safety; to have a more heightened consciousness regarding this and with such awareness to think and act proactively on their community members' behalf.

Finally, the pandemic hyper-safety environment has impacted early childhood classrooms. Many expressed schools as having become a refuge for young children who are finding the classroom a source of structure, adult reliability, safety/abuse reporting, nurturing environment, and resource provision due to the impacts of the pandemic felt in the home and community, from under-resourced communities and not. Additionally, it was thought that early childhood teachers have an opportunity to address SEL/developmental needs that have languished during the Pandemic and address safety-related fears and concerns of young people from a Nurturing Environments perspective within the classroom. There was agreement for the need to re-emphasize the Nurturing Environment model both in the classroom and to work programmatically to make a connection between the classroom to home with those same Nurturing Environment messages.

Recognizing and Anticipating Early Childhood Pandemic Under-resourced/underserved community needs

When discussing the needs of underserved/under-resourced communities disproportionately impacted by the pandemic, cumulative effects of diminished community resources, less access to technology/internet connectivity, access to healthcare and individual health status, job stability, housing, and other factors help drive a "margin of error" scenario for many. Individuals making decisions that might otherwise be mediated by access to supports from the community, friends, or family are now making "forced," resource-related decisions, sometimes involving trade-offs in safety to maintain housing, a job, or family cohesion. This margin of error reality was a theme especially powerful within the discussion of the pandemic specifically, and for those from underserved communities with young children but it also, as mentioned earlier, was an essential theme within discussions surrounding Indigenous communities. It was re-emphasized that those working with young children and parents during the pandemic within underserved/under-resourced communities work to anticipate and identify impacted resources in a timelier fashion, while assisting community members in accessing necessary resources to aid in reducing the conditions wherein margin of error/high stakes decisions that can negatively impact children, family, and the community become necessary.

Global Theme: Skills and Experience for Early Childhood Educators
Maximizing Early Childhood Teacher Impact-Current and Future

As established so far in thematic analysis, participants frequently identified the opportunities that educators have within early childhood classrooms to meet the contemporary needs and concerns of young children and furthermore, the unique opportunities and obligations they must address with the social, emotional and developmental impacts of the pandemic for those students. Within the context of preparing teachers to best serve the early childhood population, there was an acknowledgement that issues transcending the pandemic are the teacher shortage for this age-group and that the early childhood workforce from which teachers are typically recruited is sensitive to external impacts. These large-scale policy and research issues will continue to require scrutiny and action and symposium participants agreed on the critical need for timely response.

What did seem more tractable amongst participants were practical considerations for training and professional development of early childhood teachers. Even before the pandemic, increasing teacher skillsets to meet the developmental needs of young children more robustly (especially those outlined in *Recognizing and Anticipating Early Childhood Pandemic Impacts and Needs)* was a point of agreement within the field and increased standards have continued to be implemented. Now, with the heightened needs of children returning to classrooms, those improved and honed skillsets are more important than ever. Reminiscent of themes distilled from Indigenous Community needs discussions, participants again identified how critical it was to consider teacher training that is culturally and linguistically sensitive and honors training methods that incorporate modeling teaching techniques. For all teachers being trained, it was felt that approaching new teachers and seasoned teachers alike without an assumption of mastery was an appropriate and best practice approach for meeting teachers where they are and getting to the heart of what they may need.

In the end, participants agreed that communication skills for new early childhood teachers were a pressing need. Several participants recounted experiences with breakdowns in communication between parents and teachers due to teacher overconfidence, under confidence or the inability to work with parents as partners in the educational process. Additionally, some teachers no longer viewed parents as a source of valid knowledge about their child. These communication skills could be addressed in teacher preparation programs as well as in ongoing professional development.

A final area of need identified frequently during the discussion around teacher skills and experience centered on what is now possibly missing from training programs. Some participants reflected on programs that may have historically taught observation skills and basic data gathering techniques to teachers. In essence, allowed teachers to be trained to be what PAXIS calls, "Everyday Scientists."

Participants noted that many early childhood teachers have not acquired these skills and that it is very important for the teacher to at least at a baseline be able to notice children differently; to have some level of observational skills that help inform their decision making in the moment as well as more broadly when making programmatic decisions.

Amplify Limited Time in the Early Childhood Hybrid Classroom Setting

With greater specificity for the classroom context, participants shared optimism that early childhood teachers can maximize their impact in meeting their students' needs because of the practicalities of hybrid teaching delivery. It was recognized that students are now experiencing limited exposure opportunities to engage with other children, learn classroom routines, and develop behavior as a skill set due to hybrid scheduling or fluctuating scheduling that can mean students are only in their classrooms a few days each week. Many considered this an opportunity for teachers to augment time spent with students in the classroom intentionally practicing with children using self-talk, narration and rehearsal strategies. An encouraging perspective from a participant helps undergird this theme of amplifying what limited time teachers may have with students based on pandemic related contingencies: take advantage of the saturation effect that comes from children having been isolated from each other, lacking structure, and possibly immersed in screentime. This saturation creates an eagerness in young children to be open to classroom opportunities, experiences, and interactions with other children.

Global Theme: Policies and Initiatives for Support

Reaffirming Primacy of PAX Science Based Responses

A major purpose of the symposium was to look ahead and identify what policies or initiatives could be leveraged to support early childhood needs. Underpinning this area of discussion was a general participant consensus that PAX programming initiatives have always been need-based and science-grounded. Future programming, initiatives and research will continue to functionally address needs while avoiding comfort-level adaptations or adjustments to the programmatic packaging to make it more superficially consumable. Participants agreed that staying true to PAX science will best serve early childhood students and continue to reap the life-time outcomes so notable with PAXIS programs.

Leveraging Policies, Research, Data and Initiatives for Early Childhood Needs

Research and development, application development, educator supports, and parent supports, were acknowledged by participants as focal points for future research, policy design, and programmatic implementation to address early childhood needs presented in this report.

Practitioners, stakeholders, and researchers offered many specific ideas for moving forward as shown in Table 2.

Table 2 *Potential PAXIS Early Childhood Initiatives: New Mexico*

Research and Development	Application Development	Educator Supports	Parent Supports
PAX Tools: Increase adaptability to the needs of varied audiences	Web Based Strategies/App Based Strategies; co-development	Identify and re-institute pre-service gaps	Parent Daily Report as model: "Meets people where they're at"
Research DSM changes at population level	Assess PAX Tools app, usage	Measure teacher wellbeing: RCT	Match kernel to needs to problem-specific parent needs
Leverage PAX data gathering for Tools opportunities	Make apps. more robust	Identify top 5 educator/student issues to inform a research/action agenda	Create mechanisms to compel parent Tools use
Arnold Foundation-additional source of research funding	PAX app. enhancements: Providing more detailed recipes; Developmental tasks by age	Social Group Contingency-PAX Kids Club	Development around Shared Relational Frames (caregivers united with outlook of child)
Research what children face in systems of care			Link each PAX Kernel to what parents do at home
Research what youth workers need to leverage the science for children's' needs			

Discussion

Altogether, participants strongly agreed that to effectively advance a research, policy, and programmatic implementation agenda, dialogue such as that resulting from the symposium would need to continue. Table 2 shows the potential for partnership with multiple constituents, especially parents, caregivers, and indigenous communities to potentially implement kernel-based programming that meets ongoing needs for these populations. Committing to a routinely scheduled practitioner, stakeholder, expert dialogue where progress, roadblocks, new opportunities, and accountability for taking action would be key in optimizing opportunities to address early childhood needs in New Mexico.

References

Attride-Stirling, J. (2)01). Thematic networks: An analytic tool for qualitative research.

Qualitative Research, 1, 385-405.

Bombay, A., McQuaid, R. J., Schwartz, F., Thomas, A., Anisman, H., & Matheson, K. (2019). Suicidal thoughts and attempts in First Nations communities: Links to parental Indian residential school attendance across development. *Journal of Developmental Origins of Health and Disease*, *10*(1), 123–131. https://doi.org/10.1017/s2040174418000405

Cohen, D. & Crabtree, B. (2006). Qualitative Research Guidelines Project: Focus Groups

Guidelines. Robert Woods Johnson. https://www.qualres.org/HomeFocu-3647.html

Corbin, J. & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage Publications, Inc.

Fontana, A. & Frey, J. (1994). The art of science-group interviews. InDenzin, L. (Ed.), The

handbook of Qualitative Research (pp.361-76). Sage Publications

Caqueo-Urízar, A., Flores, J., Mena-Chamorro, P., Urzúa, A., & Irarrázaval, M. (2021). Ethnic identity and life satisfaction in indigenous adolescents: The mediating role of resilience. *Children and Youth Services Review*, *120*, 105812. https://doi.org/10.1016/j.childyouth.2020.105812

Gerlach, A. J., & Gignac, J. (2019). Exploring continuities between family engagement and well-being in aboriginal head start programs in Canada. *Infants & Young Children*, *32*(1), 60–74. https://doi.org/10.1097/iyc.0000000000000133

Kohl, K., & Hopkins, C. A. (2020). Learnings from the #indigenousesd global research: Twenty-first century competencies for all learners. *Journal of Teacher Education for Sustainability*, *22*(2), 90–103. https://doi.org/10.2478/jtes-2020-0018

Krueger, R. & Casey, M. (2000). Focus Groups: A practical guide for applied research. Sage Publications, Inc.

Levi-Strauss, C. (1968). The savage mind. University of Chicago Press.

Maina, G., Phaneuf, T., Kennedy, M., Mclean, M., Gakumo, A., Nguemo, J., King, A., &

Mcharo, S. K. (2020). School-based interventions for preventing substance use in indigenous children Ages 7–13: A SCOPING Review protocol. *BMJ Open*, *10*(2). https://doi.org/10.1136/bmjopen-2019-034032

Mambrol, N. (March 21, 2016). Claude Levi Strauss: Concept of Bricolage in Claude Levi

Strauss' Structural Anthropology. Theory and Criticism (Open Source). Retrieved September 23,2021 from https://literariness.org/2016/03/21/claude-levi-strauss-concept-of-bricolage/

O'Keefe, V. M., Maudrie, T. L., Ingalls, A., Kee, C., Masten, K. L., Barlow, A., &Haroz, E. E.

(2021). Development and dissemination of a strengths-based indigenous children's storybook: "our smallest warriors, our strongest medicine: Overcoming covid-19." *Frontiers in Sociology*, *6*. https://doi.org/10.3389/fsoc.2021.611356

Pramling Samuelsson, I., Wagner, J. T., & Eriksen Ødegaard, E. (2020). The coronavirus

pandemic and lessons learned in preschools in Norway, Sweden and the United States: OMEP Policy Forum. *International Journal of Early Childhood*, *52*(2), 129–144. https://doi.org/10.1007/s13158-020-00267-3

Parameswaran, R. (2001). Feminist media ethnography in India: Exploring power, gender and culture in the field. Qualitative Inquiry, 7(1), 69-113.

Patton, M. (2002). Qualitative research and evaluation methods. Sage Publications, Inc.

Sánchez-Cruz, E., Masinire, A., & López, E. V. (2021). The impact of covid-19 on education provision to indigenous people in Mexico. *Revista De AdministraçãoPública*, *55*(1), 151–164. https://doi.org/10.1590/0034-761220200502

Scarborough, W. J., Collins, C., Ruppanner, L., & Landivar, L. C. (2020). Head start and ffamilies' recovery from economic recession: Policy recommendations for covid - 19. *Family Relations*, *70*(1), 26–42. https://doi.org/10.1111/fare.12519

Shank, G.& Zukerman-Parker, M. (2008). The Town Hall Focus Group: A new format forQualitative Research Methods. The Qualitative Report, 13(4), 630-635.

Wright, A. L., Jack, S. M., Ballantyne, M., Gabel, C., Bomberry, R., & Wahoush, O. (2019). How indigenous mothers experience selecting and using early childhood development services to care for their infants. *International Journal of Qualitative Studies on Health and Well-Being*, *14*(1), 1601486. https://doi.org/10.1080/17482631.2019.1601486

Zuckermann, A. M. E., Williams, G., Battista, K., de Groh, M., Jiang, Y., & Leatherdale, S. T. (2019). Trends of POLY-SUBSTANCE use among Canadian youth. *Addictive Behaviors Reports*, *10*, 100189. https://doi.org/10.1016/j.abrep.2019.100189