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# The role of preschool peers in children's language development

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## Abstract

Almost five million children attend preschool in the United States each year. Recent attention has been paid to the ways in which preschool classrooms shape children's early language development. In this article, we discuss the importance of peers and classroom composition through the lens of age and socioeconomic status and the implications for children's early learning and development. We also discuss the direct and indirect mechanisms through which classroom peers may shape each other's language development. As part of this discussion, we focus on exposure to peer language and engagement with peers, along with teachers' classroom practices. We conclude by discussing the ways in which teachers can ensure that children in classrooms of different compositions reap the maximum benefit, along with implications for research, policy, and practice.

Keywords: preschool; peer effects; age composition; socioeconomic composition

After reading this article, the learner will be able to:

- Summarize research on preschool effects on language development
- Discuss the importance of classroom composition for early learning
- Compare and contrast direct and indirect influences of classroom peers on language development

# The role of preschool peers in children's language development

Children's language development is shaped by the environmental experiences they have during the first years of life[1]. Preschool is a learning context that the majority of children in the United States experience in the year before kindergarten, and it has been shown to have impacts on children's language.[2] However, the developmental and educational sciences are still uncovering the processes through which preschool programs shape language development. Until recently, most research on preschool education focused on teacher practices and interactions with children[3]; however, recent studies have suggested that the peer context also plays an important role in children's language development. Here, we briefly review causal evidence linking the preschool context to children's language development and then explore a key aspect of the preschool experience: The peer context.

## The Preschool Context and Language Development

In the United States, preschool is typically considered to be a childcare setting that helps prepare children to succeed academically and socially as they transition to kindergarten.[2] Preschool is offered to children from ages 3-5 and is provided in a variety of formats (e.g., every day, two days per week, full-day, part-day, etc.). In recent years, the number of children who attend preschool has increased. National estimates from the United States indicate that, today, roughly 4.69 million children attend preschool as compared to 2.88 million children in 1989.[4] This increase in the number of children who attend preschool is attributed to two key reasons. First, experimental evidence from early care and education programs (e.g., Abecedarian and Perry Preschool) developed in the 1960s has shown that enrollment in preschool has the potential to yield lifelong benefits, including in the areas of health, career success, and crime.[5,6] As this evidence has become more widely known, policymakers have increased their investments in

preschool. Second, the structure of home life has changed in ways that amplify the demand for preschool. For example, the proportion of children living with only one parent has risen from 9% in 1960 to almost 26% in 2019[7], and the number of two-parent families with both parents employed is over 60% as of 2016.[8]

As more and more children attend these programs in the year or two before kindergarten, it has become imperative to understand how the preschool context shapes their development, particularly the development of skills linked to later school success, such as language.[9] In recent years, a series of randomized control trials examined the impact of different preschool programs on children's development, including their language skills. Overall, these studies show that preschool has a positive impact on children's language development as they transition to kindergarten, but these impacts are small to modest in magnitude and sometimes inconsistent. For example, the nationwide evaluation of the federally funded Head Start program showed impacts on vocabulary, but only for 3-year-olds and not for 4-year-olds.[10] A randomized experiment of public preschool programs in Tennessee demonstrated impacts on children's early vocabulary, but not their oral comprehension.[11] Some of the largest documented benefits come from research using a regression discontinuity design to examine the outcomes of the Boston public pre-K program. This evaluation showed that the effect of one year of pre-K on children's language skills upon kindergarten entry was roughly half a standard deviation.[12] Although the above research illustrates the aggregate impacts of preschool for children's language development, we also know that these effects are not uniform, with children who are exposed to significant adversity benefiting the most, including dual language learners, children from low-income families, and children with disabilities.[12,13]

Due in part to these inconsistent findings, researchers and policymakers have sought to understand how practices *within* preschool settings shape children's development. Most of this research has focused on two elements: (1) The structural environment, including factors such as teacher/child ratios and teacher education, and (2) classroom processes, which have largely focused on the quality of interactions between teachers and children.[3] Furthermore, components of observational systems that capture structural and process elements of the preschool environment have been incorporated into policies that directly impact preschools. For example, many state Quality Rating and Improvement Systems include both structural and process quality in their ratings of preschool programs.[3] As another example, the federal Head Start program, which provides preschool services to approximately one million children a year, uses the Classroom Assessment Scoring System[14], a measure of process quality, to determine program success and continued funding.

Despite the extensive research focused on these structural and process elements of the preschool setting, and the incorporation of them into early childhood education policy, most studies have found that they only predict a small portion of children's early school success, including their language development, across the preschool year.[3] For example, using meta-analytic techniques, Keys and colleagues[15] documented only small associations between preschool quality and children's language skills. Additionally, an investigation by Early and colleagues[16] of seven major early childhood education studies found that teacher education was not consistently associated with children's development of language skills. Overall, this growing body of work suggests that commonly investigated classroom experiences have small additive effects, but that researchers, policymakers, and practitioners need to also consider other aspects of children's classroom experiences to understand how else preschool classrooms shape

children's development, especially for children exposed to significant adversity. One aspect of the classroom environment that has received increasing attention is the role of children's classmates in shaping children's early learning.

**Theoretical Rationale for Investigating the Role of Peers in Preschool**

Research on the ways in which preschool classrooms and peers shape individual children's development is guided by several prominent developmental and educational theories. At the broadest level, this focus on the classroom ecology has been grounded in bioecological theory, which asserts that complex interactions between individuals and various environmental systems drive children's early learning and development.[17] This framework argues that development occurs as a function of regular and high-quality interactions, such as children's interactions with their peers. And even though interest in the role of children's classmates has only recently received increased attention, theories of social learning[18] and cognitive development[19,20] have also informed this focus. Both social learning theory and theories of cognitive development contend that interactions between children and their peers represent one of the primary mechanisms through which the classroom experience affects children's development, including their language skills. More specifically, these developmental theories suggest that interacting with classmates can shape children's school success because it provides children opportunities for modeling behavior and scaffolding peer learning.

In addition to these landmark theoretical models that propose that children's peers directly influence their learning (i.e., child-to-child transmission), there has also been growing theoretical consideration of the other pathways through which children's classmates in preschool may affect their early school success. More specifically, developmental and educational theory has recently posited that classrooms impose many demands on teachers, such that teachers'

creation of a high-quality and instructionally rigorous classroom depends on both their own abilities *and* the attributes of students in their classroom.[21, 22,23,24] That is, the characteristics of children in the classroom collectively could be a key factor in shaping children's classroom experiences. Consequently, from a theoretical and empirical perspective, it may be that the direct effects of peers on children's learning are a proxy for a teacher effect (i.e., child-to-teacher-to-child transmission).

**Compositional Factors**

The characteristics of peers that children encounter in preschool may vary in many ways, including their age, disability status, race/ethnicity, language skills, and socioeconomic background. Here, we describe research focused on peer composition factors that are easily malleable through policy and have received a surge of research and policy interest. Specifically, we cover: (1) *classroom age composition* given that many preschool programs regulate program access by age and (2) *classroom socioeconomic composition* given that a great deal of public preschool funding in the United States is targeted at children from low-income backgrounds.

**Classroom age composition.** Many children in the United States attend preschool classrooms where there are children of different ages, typically ranging from 3-5. For example, nationally representative data from the Head Start program indicates that over 75% of classrooms are mixed-age.[25] In theory, mixed-age preschool classrooms are considered to be optimal learning environments because they provide an environment where children's differences allow them to learn from one another.[26] Additionally, smaller preschool programs may use mixed-age classrooms out of practicality, as they do not have enough children to support single-age learning. However, until recent years, most of the evidence on mixed-age

preschools and classroom age composition came from small scale studies and was relatively contradictory in nature.[27,28,29,30,31,32]

More recent studies are larger and still reveal some inconsistent evidence; however, they point to two common patterns: 1) older children in classrooms that serve different age children are likely to learn less or develop in less optimal ways than their peers in same-age classrooms[33,34,35], and 2) younger children may experience benefits of being in classrooms with older children.[21,36] For example, in terms of older children's learning and development, a recent study by Ansari and colleagues[33] using nationally representative data from Head Start programs, revealed that 4-year-olds displayed smaller gains in a composite of language and literacy skills over the course of the school year when they attended classrooms with a greater number of 3-year-olds. In practical terms, these associations corresponded to a loss of roughly 4 to 5 months of development when 4-year-olds attended classrooms where approximately half of their classmates were 3 years of age. On the other hand, Guo and colleagues[36] found that being in classrooms with a wider range in age was associated with greater gains in vocabulary over the year, but only for the younger children in the classroom. Interestingly, work from Denmark has suggested a different pattern of associations between classroom age composition and children's language growth in preschool. Namely, there is a curvilinear association whereby having a classroom age range of approximately two years is most beneficial.[37] Moreover, this association applies to both the younger *and* older children in the classroom. These disparate findings both within and across countries suggest that looking more closely at classroom processes is needed to understand how, and under what conditions, classroom age composition shapes children's language development.

**Classroom socioeconomic composition.** Even though the educational and developmental sciences have long studied the role of peers' socioeconomic status in K-12[38], much less attention has been paid to these compositional characteristics in the preschool years. On a policy level, this is somewhat surprising given the ongoing focus on socioeconomic status as a gateway for program enrollment and the growing evidence regarding the efficacy of preschool programs to promote disadvantaged children's early school success.[1] With that said, the literature that does exist suggests potential benefits of having income variation within the preschool classroom for children's early academic and social-behavioral functioning, including their language development.[39,40,41,42] For example, with a sample of approximately 3,400 preschoolers from 500 classrooms across the United States, Coley and colleagues found that the percentage of children in the classroom who were poor was associated with children's language development, above and beyond the association with children's own families' socioeconomic status.[39] Similar patterns have been documented in multi-state studies[41] and community-based studies[42] of socioeconomic composition and children's early language development. Importantly, this literature suggests that preschoolers from low-income families show *greater* language skill gains when enrolled in classrooms with a greater proportion of mixed-income (as opposed to low-income) peers.[40] This literature also suggests that the associations between classroom socioeconomic composition and preschoolers' language development are comparable in magnitude to associations with classroom instructional practices and even children's own socioeconomic status.[41] In sum, this body of work suggests that the assignment of children to classrooms is as important to children's language development as commonly used measures of classroom quality and practices. Paying close attention to the mechanisms that create classroom

compositions, including funding policies, age cutoff guidelines, and assignment processes within preschool centers may represent one route to improving children's language development.

**The role of skill in these compositions.** One way in which these compositional factors shape children's development is through their exposure to classmates of varying skills and behaviors. For example, early research established that having classmates with aggressive behaviors in preschool is associated with increases in children's own behavioral problems.[43,44,45] More recently, this line of work has shown that having classmates with higher cognitive skills is linked with preschoolers' language development.[46,47] However, it remains unclear as to whether the skills of children's classmates represent potential mechanisms for the documented associations between both classroom age and socioeconomic composition and children's early language development. This is a surprising gap in the literature considering that studies from the developmental and educational sciences have consistently shown that children from more disadvantaged homes[48,49] and younger children[10] have lower school entry skills—including language skills—than their more advantaged and older counterparts.

Given this literature on the socioeconomic and age differences in children's school entry skills, it would seem logical that peer skills should account for some of the differences that arise from classroom age and socioeconomic composition. To our knowledge, however, only a handful of studies have considered this possibility. First, in their study of classroom socioeconomic composition and concentrated poverty, Coley and colleagues found that children in classrooms with a larger percentage of poor classmates demonstrated lower average initial classroom-level language skills as compared with children in classrooms with fewer poor classmates, with effect sizes larger than most seen in other observational studies of preschool characteristics .[39] Ultimately, these authors found that one of the primary reasons why

concentrated poverty in preschool was associated with children's language development was because of exposure to classmates with lower language skills. As another example, Foster and colleagues found that classmates' language skills were associated with growth in individual children's expressive and receptive vocabulary performance across the preschool year, even when controlling for classroom age composition.[50] However, these authors did not consider whether peer skills accounted for any associations between classroom age composition and children's language development. When taken together, this emerging literature appears to indicate that the socioeconomic and age composition of classrooms are intricately linked with the classroom-level language skills, which in turn, may serve as a key mechanism for associations with individual children's development of expressive and receptive vocabulary skills.

**Peer Mechanisms within the Classroom**

One potential reason that we see inconsistent findings in research on classroom composition and children's early learning is that to understand compositional effects, we need to examine the more proximal mechanisms that shape learning within the classroom. One approach is to examine *why* classroom composition relates to children's language development. These questions are often examined in a mediational framework, and help us understand what about the classroom is different under various compositional structures and how that matters for children. The other approach is to examine *when* or for *whom* compositional factors matter. For example, there may be some classrooms where age composition matters greatly, but others where the structure and practices in the classroom make the age composition less important for children's learning. These questions are often explored in a moderation framework. Below, we detail the classroom structural and process indicators that are potentially implicated in the associations between classroom composition and children's early learning and development. We first discuss

the direct pathway through peers, and then indirect pathways through teacher and classroom-level factors.[51]

**Direct influences of peers.** One mechanism through which classroom composition may influence children's development is through their direct interaction with peers. Peer interactions are particularly important in preschool, as evidence from large scale observation studies suggests that children spend roughly a third of their classroom time in free play,[52] whereas kindergarteners spend less than 15% of their time on free choice activities.[53] Moreover, recent small-scale studies of preschool programs suggest that, on average, 40% of children's interactions throughout the school day are with their peers.[54] Given the sizable share of the school day spent with peers, we focus on two mechanisms through which children's classroom peers may have direct influences on their language development: Language exposure and classroom engagement.

***Language exposure.*** Given the frequent interactions preschoolers have during free choice activities, it is likely that children's exposure to more complex language, especially in terms of vocabulary, is partially occurring through their interactions with peers. The above is an important point of consideration when studying classroom socioeconomic and age composition given the sizable differences that exist in children's language skills, both between and within classrooms as a function of these factors. That is, some children enter preschool with more well-developed language skills and others enter preschool with less developed language skills. In support of these individual differences and the importance of peer language exposure, Ribeiro and colleagues found that the expressive language of children's peers in preschool predicted individual children's language growth across the school year.[55]

One unresolved question is who is most influenced by their classroom peers. On one hand, children who experience greater adversity (e.g., children with disabilities, dual language learners, and children from low-income families) and those who have lower skills may stand more to gain from interacting with more advanced classroom peers.[46] Related research has also shown that children with disabilities are more influenced by their peers' language, suggesting that inclusion classrooms may be particularly helpful for their language development.[56] However, other studies have shown the opposite, namely that children with higher language skills at the start of the year are more influenced by their exposure to peers and their language skills than children with lower language skills[47], and yet others have found that the influence of peer language does not vary as a function of children's own language abilities.[55] Given these discrepant findings, further research is needed to understand when and why each of these patterns occurs within classrooms, especially for children at risk.

***Classroom engagement.*** Another direct way in which peers may shape children's language skills is through their influence on the classroom learning environment and how children are able to engage with it. For example, children with lower behavioral skills may create more distractions in a classroom, which decreases their peers' engagement with learning opportunities. In fact, early studies comparing the incidence of peer conflict among different age groups indicated that peer conflict was less frequent among older age groups and child-generated resolution was more common.[52,57] Furthermore, Slot and colleagues' study of preschool classrooms in Denmark suggested that a lack of same-aged classmates for the oldest children resulted in fewer positive peer interactions and more conflict with peers.[58] Similar findings have emerged from the United States: Children in classrooms with younger classmates (as opposed to older or same age classmates) have been found to demonstrate more negative engagement with

peers.[59] One explanation for these documented associations is that younger peers may have lower self-regulation skills, which in turn, leads to conflict and disruption in the classroom. Indeed, research in early elementary classrooms has shown that peer self-regulation is a sizeable predictor of children's vocabulary growth.[60]

**Indirect influences through teacher behavior**. As noted earlier, findings from prior research do not clearly indicate whether the links between classroom composition and children's learning operate via a direct or an indirect pathway. Put another way, although it is plausible that classroom composition directly influences children's early language learning as a result of exposure to peer language and engagement with peers, it is also plausible—if not highly likely—that classroom composition and the variability in children's needs alter the classroom environment in fundamental ways that in turn have downstream implications for children's early school success. And even though the extant literature has not fully tested these potential indirect pathways, several studies have considered whether teachers' classroom practices vary as a function of classroom composition. Below, we highlight three potential mechanisms and dimensions of practice that have been of longstanding interest to the early childhood community, namely: Teachers' instructional practices, provisions for learning, and the quality of teacher-child interactions.[61]

***Teachers' instructional practices.*** An important way through which classroom composition may be linked to children's language development is through teachers' instructional practices.[62] More specifically, the use of frequent and developmentally appropriate instruction and conversational language has been recommended practice for teachers to facilitate children's language learning.[63,64] Despite these recommendations, we know that occasional or inconsistent exposure to instructional content is the norm in most classrooms. For example, results from

recent observational studies in preschools suggest that the average child is exposed to some form of instruction or learning activity for less than a third of the total time spent in the classroom, while almost 30% of time is devoted to management and routine activities, and 40% is devoted to nonacademic instruction or no content.[65] This body of research also suggests that the composition of a classroom affects teachers' allocation of time in various topic areas along with the nature of language-focused instruction.[51] For instance, children in classrooms with lower average ability levels are exposed to less effective instruction[66], with a particular lack of richness and variability in vocabulary and syntactic structure.[63] As another example, children in classrooms with a greater share of low-income peers spend more time in teacher directed instruction as compared with free play[23], and mixed-age classrooms have been found to pose challenges for teachers' provision of language instruction.[67] With that said, there is some evidence to suggest that more educated teachers are more capable of adjusting their instructional practices as compared with less educated teachers in the face of classrooms with greater demands, which in turn, minimizes compositional effects. [68]

***Teachers' provisions for learning.*** The second key dimension through which classroom composition might link to children's language development is through teachers' provisions for learning. Provisions for learning capture classroom materials and furnishings, which are key elements of structural quality in preschool programs.[61] Appropriate materials in a preschool classroom include (but are not limited to) manipulatives, books, blocks, and learning centers (e.g., literacy/books/library). Reflecting the importance of teachers' provisions for learning, several studies have found that children's language and literacy environments (i.e., the resources and opportunities available to children that support language learning) in preschool are associated with improved language and literacy outcomes.[69,70] Given this promising evidence,

many interventions delivered to teachers as part of on-the-job development have targeted teachers' provisions for learning, including the classroom literacy environments to improve children's language development.[71-74]

Just as importantly, there is an emerging body of evidence that finds that the classroom learning environment varies in fundamental ways as a function of classroom composition. For example, in a study of approximately 650 preschool classrooms, Valentino found that classrooms with higher proportions of poor children had lower quality provisions for learning.[75] As another example, Bartholomew and colleagues examined the association between classroom age composition and the quality of the language and literacy environment of roughly 225 preschool classrooms.[76] These authors found that classrooms that served older children (as compared with younger children) provided greater writing materials and book access and displayed more writing around the room, which are key elements of the preschool classroom that promote children's language development.[69,70] Although not studying classroom age or socioeconomic composition specifically, other studies have investigated the associations between the literacy environment and classroom-level child characteristics in inclusive special education classrooms that inform our focus on teachers' provisions for learning. Results from this separate but related body of work indicate that having a greater number of preschoolers identifying as dual-language learners in each special education classroom is significantly associated with a lower quality physical literacy environment. [77] This work also showed that inclusive classrooms that include peers with and without disabilities, have relatively low structural literacy quality and limited print and writing materials. However, these results parallel findings in general education preschool classrooms. [77]

***Teacher child-interactions.*** As discussed earlier, there is also a clear consensus that the quality of teachers' day-to-day interactions with children in their classrooms matters, particularly for children experiencing adversity. Several studies have now shown that teachers who are sensitive and create instructionally challenging and emotionally supportive classrooms have students who do better academically.[78,79,80] Thus, the third and final mechanism that may link classroom composition to children's development of language skills is the quality of teacher-child interactions. Studies examining interactional quality conclude that the composition of classrooms matters for the quality of teacher-child interactions, including classroom age[21,81,82] and socioeconomic composition.[23,39,41,75] Studies of preschool programs from eleven states from across the country reveal that the poorest quality classrooms are generally those composed of higher proportions of children in poverty[23,83] and the quality of teacher-child interactions is generally lower in classrooms with greater age diversity.[21,84] As before, however, there is some indication that more educated teachers are better able to engage in high quality interactions even in the face of classrooms with greater diversity in children's needs.[21]

**Current and Future Research Directions**

Although the extant literature provides key insight about the different ways in which classroom composition and children's peers shape children's early learning and development of language skills, there remain key gaps in the literature that require careful attention. First, as we continue to understand preschool peer experiences and their ramifications for children's language development, more emphasis on children's individual experiences within the classroom is warranted. For example, a recent study by Chaparro Moreno and colleagues[54] used Go-Pros to capture children's first-person experiences. This work revealed stark differences in the amount of language input individual children in the same classroom were receiving. For example, some

children were experiencing an average of seven different words from peers across 10 minutes, whereas others were only experiencing one. If these differences hold across the school day and year, it creates a sizeable disparity in language inputs across children in the same classroom. As such, understanding the consequences of these individual differences in language exposure and how to modify them, is a critical next step for the field.

One potential reason why we may see such individualized experiences is related to the social context of preschool as compared with the early elementary school grades. As preschoolers spend much of their day in free play[52], the social context plays a significant role in peer influences. For example, children may more freely choose which peers to spend most of their free time with; alternatively, some children may be isolated from their classroom peers, which may lead to fewer learning opportunities. To this end, research has shown that preschool-age children tend to interact with classmates who have similar language and literacy skills as themselves.[85] This homophily in peer engagement may serve as a significant barrier to peer learning in preschool and prevent children from reaping the maximum benefit of their enrollment in these programs, as it may prevent less skilled children from interacting with their more skilled peers. For example, work by Chen and colleagues has shown that children with disabilities experience fewer peer language resources, as captured by the skills of the peers they interact with most frequently.[86] This same study also found that peer language resources were more strongly associated with language growth for children with disabilities than their typically developing peers, underscoring the importance of attending to children's individualized classroom experiences to promote equitable growth.[86]

**Implications for Practice**

Although this paradigm of research is still emerging, it is clear that children's classmates play a critical role in children's academic learning, social behavior, and classroom engagement. One way to ensure equitable growth in the classroom setting is to develop training and professional development for school-based practitioners and teachers that incorporates peers in children's learning and recognizes the importance of children's individualized experiences in the classroom. With that said, a recent meta-analysis of interventions designed to promote children's language development in early care and education settings found that only 5% included peers in the intervention.[87] Incorporating peers, and providing practitioners and teachers with tools to help them foster positive peer interactions throughout the entire class, is one potential direction for increasing the efficacy of future interventions. For example, working with children to develop positive interaction strategies with peers may have influences on academic development, in addition to increasing their sociability. This may be particularly helpful for children with disabilities, given the research showing their heightened susceptibility in the peer network.[86]

Another potential direction for future practice is to emphasize practices that allow teachers to effectively differentiate their instruction to match the needs of every child in the classroom. Differentiation of instruction and classroom practices is likely to be critical in classrooms serving children of different ages and children from different socioeconomic backgrounds who enter preschool with wide ranging skills. After all, we know that children who receive personalized instruction that meets their needs benefit the most from their classroom experiences.[88,89] At the same time, however, early childhood educators and elementary school teachers alike often report feeling unprepared to effectively differentiate and individualize their classroom instruction.[90] Thus, it is important to provide practitioners and teachers with professional development opportunities so that they feel prepared to respond to the varying needs

among children in their classroom and so that they can provide children with different learning opportunities that match their needs and interests.

There are also many avenues through which school-based speech-language pathologists (SLPs) and other practitioners can play a role in promoting positive peer interactions for learning. For example, SLPs may choose to spend time directly in the classroom and help facilitate positive peer interactions among classmates. Alternatively, they may be able to use their in-depth knowledge of specific children's needs to help teachers differentiate their instructional strategies. Recognizing the importance of peer interactions to children's learning provides another potential mechanism through which SLPs can help ensure that children receive the input they need to develop their language and literacy skills.

**Conclusions**

The influence of preschool on children's language development is clear; however, to understand the true potential of these programs, we need to identify the different factors within the classroom that lead to the most optimal developmental outcomes. In reality, there is no one factor or aspect of the classroom environment that is going to be the driver of children's language development. Like the research on teachers' classroom practices[15,62], research on classroom composition and peer influences in preschool also finds relatively small associations with children's language development. Furthermore, which factors are most meaningful for language development are likely to vary across children. Accordingly, identifying the constellation of factors that matter and for whom they matter is an important direction for this body of research. Although they are theoretically malleable, preschool compositional policies are not likely to change in the short-term due to a myriad of factors (e.g., geographic, political, cost considerations). Therefore, it is critical to identify the practices that make classrooms serving

children of different ages and children from different socioeconomic backgrounds most effective so that all children reap the maximum benefit.

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1. Preschool programs and classroom composition are particularly important for:
   a. Children from more advantaged families
   b. Children in part-day programs
   c. Children who come from English speaking homes
   **d. Children who experience greater adversity**
   e. Children without disabilities

2. Which of the following statements is FALSE?
   a. There is no <u>one</u> factor or aspect of the preschool classroom that is the driver of children's language development
   b. Interacting with classmates provides children opportunities to scaffold peer learning
   c. The structural and process elements of the preschool classroom only predict a small portion of children's early school success
   d. Teachers creation of a high-quality environment varies as a function of their own abilities and the attributes of children in their classroom
   **e. Children's experiences in the preschool classroom do not vary greatly from child to child**

3. One way to ensure equitable language growth for children in preschool classrooms is to:
   a. Increase the eligible age for preschool enrollment
   **b. Develop training and professional development for teachers on incorporating peers in children's learning and individualizing children's classroom experience**
   c. Reduce the percentage of older children in the classroom
   d. Place children with IEPs and children without IEPs in different classrooms
   e. Expand the class size

4. What factors might explain the connection between classroom composition and children's language outcomes?
   a. Parental involvement in the preschool classroom
   **b. Teachers' instructional practices**
   c. Teacher-child ratios
   d. Children's internalizing behaviors
   e. The number of annual classroom field trips

5. Why might the influence of peers on children's language development differ between preschool and kindergarten?
   **a. Preschool children have more peer exposure than kindergarten children because they spend more of their classroom time in free play.**
   b. Kindergarten children have more peer exposure than preschool children because they spend more of their classroom time in free play.
   c. Preschool classrooms environments are more structured than kindergarten classroom environments.
   d. Preschool children have more advanced language and literacy skills than kindergarten children.
   e. None of the above