

Fostering Intrinsic Motivation in Early Childhood Classrooms

Martha P. Carlton^{1,3} and Adam Winsler²

Young children are born with an innate curiosity to learn about their world. This intrinsically instigated learning is often called mastery motivation. Patterns of motivation are established at an early age. The early childhood years are crucial for establishing robust intrinsic motivational orientations which will last a lifetime. By the time many children reach school, much of their motivation has been lost or replaced with extrinsically motivated learning strategies. Preschools and elementary schools have been criticized for contributing to such negative motivational patterns in children. This can be changed. Early child care situations and preschools can instead be instrumental in the strengthening of children's motivation. The goal of this paper is to show that through an understanding of the beginnings of motivation, we can begin to find ways to build strong motivational patterns in children that can carry on to later years of learning.

KEY WORDS: Motivation; classroom, preschool; infant.

INTRODUCTION

When a child is born, there is within that child an innate need to interact with the environment. These interactions lead to learning and the acquisition of knowledge. The motivation that drives this learning is based solely within the child and requires no outside rewards for its continuation. This motivation has been seen as humans' inherent intrinsic motivation to learn (Deci, 1975). As children reach school age, however, many do not seem to possess this interest in learning (Stipek, 1988). What happens to this motivation? What can we do to foster its development? By looking at the origins and development of intrinsic motivation, it is possible to identify some of the factors that can result in the strengthening or weakening of motivational patterns in young children. The purpose of this article is to explore the developmental differences in children from birth to 5

years with respect to motivation, and to provide several ideas, activities, and principles that early childhood educators can use to foster intrinsic motivation in all young children. Children's development will be divided into four age ranges: birth to 9 months, 9–24 months, 24–36 months, and 3–5 years. During each of these age ranges, specific activities will be discussed that can foster the development of intrinsic motivation in early childhood settings and at the close, a table will be given summarizing ten major motivational principles for early childhood professionals.

A DEFINITION OF MOTIVATION

Motivation can be defined as the process by which children's goal-directed activity is instigated and sustained (Pintrich & Schunk, 1996). Goal-directed behavior may be intrinsically motivated, extrinsically motivated, or motivated by a combination of the two. Intrinsic motivation refers to the desire to participate in an activity merely for the pleasure derived from that activity (Pintrich & Schunk, 1996). Conversely, an extrinsically motivated activity would be one that is engaged in for the sake of a desirable outcome, such as praise or reward. Intrinsic motivation is associated with greater learning

¹College of Education, University of Alabama, Tuscaloosa, Alabama.

²Department of Psychology, George Mason University, Fairfax, Virginia.

³Correspondence should be directed to Martha Carlton, Educational Psychology, College of Education, University of Alabama, Box 870231, Tuscaloosa, Alabama 35487; email: mcarlton@bamaed.ua.edu.

and achievement in children (Gottfried, 1985; Pintrich & Schunk, 1996). This enhancement of learning occurs presumably because intrinsically motivated students are more involved in their learning, and they use strategies to promote deeper understanding and future application of that learning. Intrinsically motivated children experience more enjoyment from their learning, gain greater knowledge and insight, feel better about themselves, and are more likely to persist in goal-directed activities (Barrett & Morgan, 1995; Deci, Vallerand, Pelletier, & Ryan, 1991; Ford & Thompson, 1985; Harter, 1978; Pintrich & Schunk, 1996). If intrinsically motivated learning is better than extrinsically motivated learning, then it would appear to be to the benefit of all educators to understand the functioning and development of this type of motivation.

INTRINSIC MOTIVATION IN THE EARLY CHILDHOOD YEARS

Intrinsic motivation is made up of three basic psychological needs that are thought to be innate in human beings: the needs for competence, relatedness, and autonomy or self-determination (Deci *et al.*, 1991). Competence is understanding how to achieve various outcomes and having the belief that you are capable of obtaining those outcomes. Relatedness involves the ability to develop secure and stable relationships with others in a social context. Autonomy is the self-regulating and self-initiating quality of one's own actions. The development of these three areas can be seen in the context of the young child.

The newborn is filled with the desire to respond to the many stimuli presented by her environment. As the child interacts with the environment, certain events occur. If the child can relate her action with the reaction of the environment, a sense of control over the environment is gained. This sense of control strengthens feelings of competence within the child and leads to further exploration and experimentation. With each successful interaction, the sense of competence grows (Ford & Thompson, 1985).

This growing sense of competence is closely linked with the child's attachment to significant caregivers. As children develop secure relationships with caregivers, they become freer to exhibit more exploration within the environment. They are also able to use the caregiver as a secure base for explorations as they attempt to master the environment (Ford & Thompson, 1985). The security of initial warm attachment relationships facilitates the ability to develop other meaningful relationships in later childhood. Feelings of relatedness to early childhood

teachers motivate and free children to explore the learning environment (Ryan & Powelson, 1991).

As the child becomes older, autonomy becomes more important. Autonomy is the need to regulate one's own behavior and to govern the initiation and direction of one's actions (Ryan & Powelson, 1991). Children from homes where autonomy is supported tend to transfer their feelings of autonomy to school situations. Learning environments can also be seen as either autonomy-supportive or controlling. Autonomy denotes an inner sense that one's actions are coming from within one's self and that the individual has control of those actions. Controlling situations cause the individual to feel a lack of personal control over actions and little personal responsibility for those actions. Learning gained through autonomy-supportive events facilitates a feeling of self-determination and often results in greater understanding of the material being learned (Deci & Ryan, 1987).

As children become older, motivational patterns become differentiated by various subject and task areas. For example, each individual will have different motivational patterns for mathematics, reading, music, etc., depending on their history of experiences in those domains. All motivational levels do not have to be equal across domains for each individual (White, 1959). Infants and young children, conversely, are seen to have an undifferentiated need for competence; they have only a general need to master their environment. This is often referred to as "mastery motivation" (Barrett & Morgan, 1995). All mastery motivation is intrinsic in nature since children find the behavior rewarding in itself with no need for external rewards. Some aspects of mastery motivation include: (a) persistence at tasks that are somewhat difficult, (b) a preference for one's own control over environmental events (as opposed to passive observation), and (c) preference for some degree of challenge (Barrett & Morgan, 1995). All children start out with an optimal degree of motivation at birth, with the exception of some children whose special needs may compromise their motivation. The differences in older children's motivation is determined by what happens to them in their early years.

How does motivation manifest itself within the early childhood classroom? Here are two different children in the same preschool classroom. Sarah is 3 years old. She enjoys coming to school and is seldom ready to go home at the end of the day. She chooses activities that present a challenge to her and she persists until completing the activity to her own satisfaction. She decides what she would like to do during the day, and is pleased with her own abilities. Although she occasionally seeks the

teacher's help with more difficult activities, she is content to work on her own, and she persists on activities for extended periods of time. Sally, on the other hand, needs constant help from the teacher. She seldom is able to select her own activity or plan what she would like to do during the day. When she does make a decision, she selects only those activities that are easy enough to complete rapidly, and demands the teacher's approval when she is finished. Sally quits an activity at the slightest obstacle, and rarely completes anything. One essential difference between these two children is their motivational orientation. While Sarah is very intrinsically motivated, Sally's activities are mostly extrinsically motivated.

As can be seen from this illustration, motivation is an important topic for early childhood educators. It determines a child's total functioning in learning environments. There is little published material dealing with these issues that caretakers can turn to for information. While much is known about different motivational patterns seen in children and their relation to academic performance and achievement in the later school years (Pintrich & Schunk, 1996), less information is available about the development of early motivation in the preschool years.

A DEVELOPMENTAL SEQUENCE FOR MOTIVATION

Infants (Birth to 9 Months)

Description of Infant Motivation. At birth, infants are capable of limited voluntary motor movements. They can turn their heads, kick their legs, and fling their arms about. They are also capable of controlling their sucking responses. From this state, infants rapidly gain control of more motor functions as muscle coordination develops. Within 9 months, the average infant has progressed from a state of random movements to a child who can crawl across the room and pull himself to a standing position, possibly even move a few steps. During these great changes, what can help maintain the child's motivation?

Research on Infant Motivation. Infants are predisposed to try to control their environments from birth. When infants can see the actual consequences of their actions, they are motivated to continue the actions. Young infants, of course, have a very limited behavioral repertoire for controlling their environment. Cries, vocalizations, facial expressions, and small limb actions are what most people can observe in the infant as attempts at control. Psychologists, however, in the laboratory have been able to capitalize on another important and natural infant behavior—sucking. By using pressure-sensitive

pacifiers wired to computers which control the presentation of different stimuli, researchers have learned that infants within the first few weeks of life will control the rate of their sucking (i.e., increase or decrease sucking speed) in order to view or repeatedly view pleasant visual stimuli. That is, infants will systematically suck on the pacifier at the rate that presents desired (i.e., face-like) stimuli rather than the rate that presents either other, less attractive stimuli or no stimuli, and infants early on prefer to use the pacifier which controls the presentation of stimuli rather than one that does not (Rovee-Collier, 1987). Also, infants remember (in terms of repeating/increasing their sucking rates later) which stimuli were previously under their control and which stimuli were not (DeCasper & Carstens, 1981). Such research suggests that infants are much more sophisticated than had been previously thought and that infants' motivation and goals can be assessed if one carefully interprets infant behavior from the perspective of their own behavioral repertoire.

Slightly older infants begin to gain additional control over muscle movements and use more involved means to interact with their environment. Several studies have illustrated this point. Infants who are given a mobile that is activated by their own movements, become more active and escalate the frequency of their movements when viewing the mobile again later (Shields & Rovee-Collier, 1992). Continued exposure will also result in social reactions to the movements, such as smiling and cooing (Watson & Ramey, 1972). Children react similarly to a string tied around their wrists which activates pictures and pleasant music. If the pulled string no longer results in music and pleasant pictures, the child will become angry and unhappy (Lewis, Alessandri, & Sullivan, 1990). Although infant care centers are not likely to have computerized pacifiers which present stimuli, nor might they wish to attach strings between infants' arms and their mobiles, infant caregivers can learn to recognize infants' cues and attempts at mastering the environment and arrange the environment such that infants have multiple opportunities to do so.

Recommendations for Caregivers. Caregiver actions are also critical in the development of the infant's motivation. The beginnings of mastery feelings develop as a child sees that his actions upon the environment have an effect. If the child's actions are consistently responded to and reinforced by caregivers, the infant develops an expectancy that his/her actions have an effect on the environment (Lewis & Goldberg, 1969). By providing toys that would reinforce this feeling of environmental control (i.e., toys that actually manifest a change when manipulated), the caregiver can insure that the child will

continue to experience feelings of control over the environment.

Both the inanimate environment (including the physical surroundings and the toys presented to the child) and the social environment (including the individuals that the child comes in contact with) function independently to foster mastery motivation within the child (Yarrow, Rubenstein, Pedersen, & Jankowski, 1972). Social stimulation extends the development of social responsiveness and language, and occurs when caregivers respond to the child's social actions. This might include responding to the child's verbalizations, playing peek-a-boo, or responding to smiles by smiling back. Social stimulation also leads to stronger attachment to caregivers and feelings of relatedness to others. Stimulation from the inanimate environment furthers exploratory behaviors. This can be facilitated by providing toys that are interesting and responsive to the child. The infant's orientation to both objects and people become part of a feedback system with the environment which influences the infants' functioning over a long time period. A wider variety of inanimate objects leads to a greater amount of exploratory behavior exhibited by the child. The responsiveness of both the social and the inanimate environments facilitates motivational and skill development (Yarrow *et al.*, 1972).

Specific activities that are appropriate for this age group and that would enhance exploratory behavior are: mobiles that are activated by the child's movements; brightly colored objects that can easily be grasped, and that make sounds when moved; objects with interesting taste, texture, and smell: small, soft dolls or animals with emphasis on the face, especially the eyes.

Infants/Toddlers (9–24 Months)

Description of Infant/Toddler Motivation. During the period from 9 to 24 months, infants continue to try to control events and are better able to decide what to do to accomplish particular ends (Barrett & Morgan, 1995). Success is still not based on externally imposed standards because caregivers tend to reward all attempts, but is based on the infant's ability to accomplish desired ends. Infants begin to evaluate themselves and are motivated to do things for themselves. (Barrett & Morgan, 1995)

Research on Infant/Toddler Motivation. Although most research has been done with mothers and their children, it is likely the same for all caregivers. It has been found that the mother's responsive behavior to the child is the most important factor of determining future competence across all types of exploratory behavior

(Hendrickson & Hansen, 1977). Mothers who were responsive, but who did not instantly answer every request from the children were more likely to rear motivated and competent children. These children are able to independently explore with little mother-child interaction, knowing that mother is there when needed. This enhanced freedom of exploration leads to greater development of competence. On the other hand, infants whose mothers are constantly choosing and directing the child's activities tend to initiate fewer of their own explorations, resulting in infants who show less competence and mastery motivation. Mothers who interact less often but facilitate discovery and exploration in their infants when they do play with them, tend to have children who persist longer on difficult tasks (Jennings, Harmon, Morgan, Gaiter, & Yarrow, 1979).

There appears to be a negative relation between the level of a child's mastery with objects and the amount of parental interference in the child's interactions with those objects (Wachs, 1987). The more a parent interferes with the child's independent exploration of objects, the less the child will progress toward mastery of that object. It is the independent exploration that leads to mastery. Providing responsive toys in one setting also helps the child learn strategies to deal with new toys in other settings. The child has learned the necessary strategies to deal with responsive toys at home, and these strategies can be applied to unfamiliar situations away from home. If a child has not learned how to deal with these toys at home, he faces difficult circumstances when in an unfamiliar situation. He not only has to deal with the new situation, but also with new toys, which may cause unmanageable stress (Wachs, 1987).

Infants of mothers who support their child's autonomy by allowing them to freely explore the environment tend to exhibit more overall persistence plus more competence and positive affect at 20 months of age (Frodi, Bridges, & Grolnick, 1985). Maternal sensitivity, defined as effectively reading infant cues and being responsive to the child's communications, relates highly with persistence and competence. Finally, these authors found that mothers who control their children's behaviors through the use of supportive rather than punitive corrections tend to have children who score higher on ratings of persistence, competence, and positive affect.

Adult attention-focusing skills become an important factor in caregiver interactions with the older infants (Yarrow *et al.*, 1984). Maternal stimulation teaches a child how to focus his or her own attention, enhancing the child's exploratory competence (Belsky, Goode, & Most, 1980). Infants who display the greatest amount of competence while exploring have mothers who frequent-

ly focus their attention on objects and events within the environment, in a responsive, respectful, and nonintrusive manner.

Recommendations for Caregivers. Caregivers can be effective in many ways when focusing the child's attention. The caregiver can arouse a child's interest when it is waning, redirect attention to a new area, or inhibit actions in an overstimulated child. While demonstrations can increase a child's interest in a particular toy, extended demonstrations can decrease that same interest. A single demonstration of a new object may be enough to interest the child, with the adult then allowing the child to explore on its own (Ruff & Rothbart, 1996). An important principle for adults to follow when trying to foster joint attentional states with infants while simultaneously trying to avoid being intrusive, is for adults to present various toys and stimuli but for them to follow the gazes, cues, and interests of the infant.

Language development is also influenced by joint attention with the caregiver. When the adult focuses verbally on an object that the child is interested in, the child can more easily establish the joint attentional focus with the adult. This facilitates greater opportunities for verbal development and other nonlinguistic scaffolding of the child's language development (Tomasello & Farrar, 1986).

A mother's emotional response to particular aspects of the environment can also have consequences for the child's responses in ambiguous situations (Gunnar & Stone, 1984). If mother is happy and positive, the infant is reassured and can respond positively to an uncertain situation. Infants look to adults for ways of reacting and positive caregiver responses can elicit the same responses in children.

Appropriate activities for children in this age range that would support autonomy and help focus attention are: play songs that are repetitive and simple enough for the child to repeat; flutter/action balls; bristle-type blocks; grasping toys that require complex manipulations (dials, switches, doors that open); push toys with sturdy handles for walking; puzzles with large knobbed pieces; round nesting materials.

Toddlers/Preschoolers (24–36 Months)

Description of Toddler/Preschooler Motivation. By the age of 24–36 months, children are developing an appreciation for standards, self-awareness, and self-evaluation. They are also developing the ability to execute a sequence of behavior to achieve a goal. By 3 years of age, children become interested in doing well rather than just accomplishing socially valued tasks (Barrett & Morgan, 1995).

Research on Toddler/Preschooler Motivation. Children in this age group are able to evaluate their own behavior and to respond appropriately to successes and failures. Children are able to sense which activities are harder for them, and experience greater pride when accomplishing these difficult tasks, with less shame when failing to accomplish them. When tasks are determined to be easy, shame is apparent if the task is failed, but only minimal pride is exhibited for successes (Lewis, Alessandri, & Sullivan, 1992).

Adult teaching styles remain of importance during the toddler years. Parents and teachers can help their children work through tasks by giving less support after success and more support after failures (Pratt, Kerig, Cowan, & Cowan, 1988). Successful parents respond to improvements of their children by systematically reducing their own involvement and allowing children to participate and accomplish as much of the task on their own as possible, using a strategy that is known as "scaffolding."

The basis of scaffolding is the establishment of a joint problem solving situation where two individuals interact while trying to reach a common goal. The adult is warm and responsive to the child's needs, but provides only enough support to keep the child engaged in the task and interacting. The adult carefully structures the task to maintain the child's interest by providing an obtainable challenge at all times. The amount of adult involvement lessens as the child gains competency in the task and is more able to function on his own. By allowing the child more freedom and by providing questions that allow the child to discover his own solutions to the problem, self-regulation skills, motivation, and learning are increased (Berk & Winsler, 1995).

Children early in the toddler years are becoming increasingly aware of the multistep nature of tasks (Barrett & Morgan, 1995). While simple cause-and-effect toys such as a pop-up toaster, were appropriate at earlier ages, more complex combination toys are now needed. A ring stacking toy that requires a sequence of actions for solution would be a more appropriate example for the toddler. Early in their second year, children become able to select appropriate tasks on their own due to a rapidly developing self-awareness (Busch-Rossnagel, Knauf-Jensen, & DesRosiers, 1995). Since the provision of appropriately challenging toys is positively related to persistence, the caregiver still has a very necessary role in selecting the range of activities that will be at the child's disposal and in providing the guidance and scaffolding necessary for children's effective learning of these more complex, sequential skills.

Recommendations for Caregivers. Appropriate

activities for this age range that allow for self-evaluation, encourage multistep solutions, and provide situations for scaffolding would include: all sizes of balls to throw and catch; simple pop-up books; dress-me dolls; simple matching games; rhythm instruments to play with accompanying music; tunnels to crawl through; boards with magnetic shapes; 5–10 piece wooden puzzles; rocking horses; housecleaning sets; matching and sorting materials.

Preschoolers (3–5 Years)

Description of Preschooler Motivation. By three years of age, children are becoming more involved with the use of verbal problem solving skills, and the internalization of speech. Children are beginning to direct their own learning, with private speech, or children's self-talk, being a critical component in this development. Private speech begins as social conversation, but develops into a means of self-regulation of activity (Berk & Winsler, 1995). The child uses overt verbal communication to direct her own behavior in problem solving situations. When the young child is challenged by an activity, she will talk herself through the solution to the problem. Just as the adult scaffolded the child's behavior in joint problem solving situations earlier, the child can now scaffold her own behavior through the use of private speech (Winsler, Diaz, & Montero, in press). The child is now able to accept the role of self-regulator which was once fulfilled by the adults in his environment.

Research on Preschooler Motivation. When children have reached a level of self-regulation, they are able to feel that they have gained some level of control over their own environment which leads to feelings of self-competence. This ties back to two of the three innate needs that are required for the development of intrinsic motivation: competence and autonomy. The ability to be self-regulated is the basis for autonomy, while the establishment of that autonomy leads to feelings of competence, all of which lead to strengthened intrinsic motivation. Private speech is an indicator that the child is involved in motivated, engaged activity. Rather than urging children to work quietly, caregivers should encourage children to verbalize about their activities, carefully scaffolding their interactions to provide the child with the appropriate level of help (Berk & Winsler, 1995).

The appropriate use of rewards is also of extreme importance at this age. As caregivers of young children, our intuition may tell us that if we reward children for completing a task, we will strengthen their motivation for engaging in that task. This notion is linked to the idea that children are devoid of their own motivation and that

it is the job of caregivers to motivate children from the outside. However, we now know from a large body of research that this is simply not true. Giving rewards to children for an activity that is already interesting to them actually reduces their motivation for the activity and makes them less likely to repeat the activity later (Cameron & Pierce, 1994). Lepper, Greene, and Nisbett (1973), for example, compared two groups of preschool children who initially liked to draw. One group was given rewards (an award) for drawing and another group did not receive rewards for drawing. The two groups were then measured as to how much time children voluntarily spent drawing a week or so later. Children who received the rewards spontaneously chose to draw significantly less often than those who were not rewarded for drawing earlier. The reason is that young children are filled with their own internal, intrinsic motivation for various activities. When children are rewarded for doing a task for which they were already intrinsically interested, they tend to reinterpret that the reason for doing the activity is to get rewards rather than to do the activity for fun. The child can become focused on the extrinsic reward and lose sight of the intrinsic nature of learning. Another problem is that children often feel like they are under external rather than internal control when they receive excessive rewards, praise, and punishments. What results is that children are less likely in the future to want to repeat the task simply for fun (Lepper, 1983).

When rewards are used, they should be infrequent and given only as feedback that focuses on the effort of the child rather than the quality of the final accomplishment (Ames, 1992). By focusing on the accomplishment, rewards can lead to feelings of inadequacy and focus the child on his work in relation to others rather than on his own abilities and efforts (Solomon, 1996). Praise of the child's effort, on the other hand, will help instill feelings of self-worth that strengthen motivation (Deci *et al.*, 1991).

Recommendations for Caregivers. The role of the teacher is significant at this age level. The teacher provides the framework of goals and multiple activities for obtaining those goals. If the goals are appropriate for the children and the activities are well organized, then the teacher should be able to step back and allow the children to pursue their own learning with guidance from the teacher as needed. However, it is important that early childhood teachers not conclude from the above that the role of the teacher is to stand back and not intervene or get involved with the children's activities. Teachers need to provide structure and assistance, without completely controlling every learning activity. Neither extreme of the totally teacher-directed or the completely child-cen-

tered classroom seen in many early childhood programs is optimal for promoting motivation and self-regulation (Berk & Winsler, 1995). Rather, preschool programs which fall in the middle of the continuum, in which children are given independence within intermediate amounts of structure and adults sensitively direct children's activities, are perhaps the best models for developing children's intrinsic motivation and competence (Berk & Winsler, 1995). Children's persistence, motivation, and participation in learning-directed activities is greatest during early childhood curricular activities which are pursued in a semistructured environment (Winsler & Diaz, 1995).

When applied to older children who are moving on to preschool classes and pre-kindergarten situations, the same suggestions for activities should apply. Children need structure that allows for free exploration. They should be challenged and allowed to set their own goals and to evaluate their own successes. Setting the environment up for this type of learning is of utmost importance. Activities need to be carefully selected to provide the correct amount of challenge and to engage curiosity. Guidance and scaffolding techniques properly utilized will help children develop to their highest potential.

Appropriate activities for this age range which will provide the atmosphere for learning may include: large and small trucks, cars, animals of all types; simple machines; measuring materials; beginning computer software; props for dress-up and pretend play; more complex puzzles including jigsaw as well as fit-in pieces; realistic ride-on toys; puppets and elaborate puppet theater; mosaic blocks; climbing structures; picture bingo, and matching games.

SUMMARY

From birth, children are instilled with an innate desire to learn about their world. What happens during the early years may determine the strength and type of motivation the child will have in later years. Caregivers play an extremely important role in the motivational life of the developing child. Table I provides a summary of what we feel are the ten most important principles for fostering intrinsic motivational patterns in early childhood classrooms. If the caregiver can remain flexible and respond to the changing needs of the child, then mastery motivation can be enhanced throughout the child's early development. Scaffolding techniques can be employed to further enhance the development of motivation, self-regulation, and learning skills. The careful and selective use of appropriate rewards focusing on the process of learning rather than the product will also enhance motivation-

Table 1. Ten Key Principles For Strengthening Children's Intrinsic Motivation in Early Childhood Classrooms

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1. *Provide a Responsive Environment.* Present toys and activities that allow the child to actually see the effect that s/he has on the environment.
 2. *Give Consistent and Responsive Caregiving.* Respond to the child in consistent ways. This allows the child to develop a sense of expectancy for reactions to his/her behavior. Responding to the child's cries and vocalizations builds the child's sense of agency in the world.
 3. *Support Children's Autonomy.* Allow for children's free exploration and choice within the parameters you have set up in your classroom.
 4. *Establish Close Relationships.* Young children are more comfortable exploring and challenging themselves when they are in the presence of caregivers with whom they have close, warm, and caring relationships.
 5. *Establish Joint Attention.* Provide many opportunities for joint attention and joint collaboration with children on specific objects and/or tasks and talk about the object/task. Such episodes increase feelings of relatedness and agency and advance language, a tool children will use later to regulate their own motivation.
 6. *Provide a Good Motivational Role Model.* By showing confidence in your abilities as a teacher, keeping a positive emotional tone and attitude, modeling persistence and a preference for challenge, and showing enthusiasm in learning for learning's sake, early childhood professionals can maximize the chances that young children will exhibit these same motivational qualities.
 7. *Provide Challenge.* Children's self-efficacy is increased as they succeed at more and more challenging tasks. Provide developmentally-appropriate, yet challenging, activities for the children and gradually increase the difficulty level as children become more competent.
 8. *Scaffold Children's Problem Solving.* In order to insure that children remain engaged in goal-directed pursuits and succeed on challenging tasks, teacher guidance may be needed in the form of sensitive scaffolding. Scaffolding refers to an adult-child interaction style during joint collaboration in which the adult carefully and dynamically modifies task difficulty and adult verbal assistance (i.e., asking leading questions) to allow the child to become increasingly more responsible for completing the task on his or her own.
 9. *Foster Self-Evaluation.* Give children opportunities to evaluate their own activities and performances. Explicit questions to children may be needed to get the children to do this (i.e., "How do you feel about your (product)?" "Are you happy with that or do you want to do more?"), or to get the children to realize that they are already self-evaluating (i.e., "I like the way you looked at your (product), decided it wasn't the way you wanted it, and changed it.")
 10. *Use Rewards Sparingly and Cautiously.* External rewards can reduce children's intrinsic motivation. Rewards should be used sparingly in the classroom. When rewards are used, they should emphasize the child's effort, persistence, and process, rather than performance, and they should be given in an informational, rather than controlling, manner.
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al skills. Allowing children to develop to their fullest potential can help them maintain their motivation and excitement in learning throughout the school years.

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