



ACTIVE PLAYFUL --- LEARNING

Coaching Guidebook

November 2023





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1. ACTIVE PLAYFUL LEARNING OVERVIEW

Active Playful Learning (APL) is a leading pedagogical program co-constructed by educators, school administrators, and learning scientists to provide a practical and evidence-based way to better engage students and teachers in deeper learning. Everything offered in this manual is based in research findings in education. The superscripts are pegged to the actual scientific papers if you want to read more. Therefore, readers can assume that we are building on the latest knowledge of how children learn best and the skills they need to learn to be successful both in their careers and personal lives in this century.

APL situates student learning in the context of real-world experiences drawn from the neighborhoods they live in, the traditions they celebrate, and the communities that support them.

APL is built upon the science of how humans learn. We learn best when information is presented in an **active, engaging**, and **meaningful** environment that is **socially interactive, iterative**, and **joyful**¹⁻⁴. We call this active playful learning, which leads to

- deeper learning for students,
- reinvigorating children's love of school, and
- reigniting teachers' joy for teaching.

Active playful learning starts with the **purposeful learning goals** set by educators, including district and school curriculum goals. Children have **agency** in the ways that they reach these goals and demonstrate their understanding.

Teachers provide multiple pathways to achieve learning goals. Teachers guide students' learning as they develop a suite of skills needed for lifelong success, including the 6Cs of **collaboration, communication, content expertise, critical thinking, creativity**, and **confidence**^{2,5}.

Students learn less and are less engaged when in large-group instruction or at their desks working alone⁶. APL supports teachers to facilitate collaborative, hands-on small-group learning as opposed to large-group instruction and individual seatwork.

How do we collectively achieve active playful learning (active, engaging, meaningful, socially interactive, iterative, and joyful learning)?

- By using **small and paired groups**.
- By increasing **students' contributions** to interactions with peers and teachers.
- By supporting **hands-on and minds-on** exploration, discovery, and inquiry.
- By giving students **choice and voice** in their own learning.
- By helping students **connect their learning** to other experiences both in and out of school.
- By infusing **enthusiasm and positivity** into learning experiences.

APL is a comprehensive approach that can be applied to all subjects, in any context. Our program focuses on infusing APL into mathematics instruction as a starting point. Our hope is that teachers feel empowered to apply these principles across all topic areas they teach in the classroom.

Through [group workshops](#) and [individualized coaching](#), APL helps elementary teachers (kindergarten to grade 4), and their students experience joyful teaching and deeper learning. We invite you to join us in the co-construction of active playful learning so that all children are prepared to thrive in the world of tomorrow.

To learn more about the science of APL and its impacts on joyful teaching and deeper learning, including reflections from teachers and administrators:

[APL Website](https://activeplayfullearning.com/) <https://activeplayfullearning.com/>



[APL: An Overview \(video\)](#)



[APL Teacher Testimonials \(video\)](#)



[Making Schools Work \(book\)](#)





2. THE APL APPROACH

The Active Playful Learning (APL) method is a bold endeavor to bring an evidence-based whole-child approach to elementary classrooms across the U.S. We want to intentionally prepare our children for their dynamic futures. The key word for the 21st century is ADAPTATION as our kids will hold jobs that have not yet been invented!

Our goal is to help teachers rekindle the wonder of teaching – of seeing that lightbulb suddenly illuminate! This is what happens when we teach in the way that human brains learn. We want nothing less than a change in mindset about providing children opportunities to learn and grow through active, meaningful, socially interactive, iterative, and joyful experiences. This is NOT a change in curriculum. It is a change in approach. *We adopt a guided play approach embedded in the culture of the community using the school’s existing curriculum.* This means each school can meet state and country standards. But with APL, teachers will have a good time doing it as they infuse playful learning strategies into all aspects of instruction.

The APL method targets educational policy and communicates the value of active playful learning to all stakeholders from families to governors. Our goal is three-fold. We hope to:

1. demonstrate the efficacy of active playful learning and shape the national narrative around what it means to learn in school.
2. help teachers, schools, and districts provide evidence-based guided play experiences
3. contribute to a systematic change in mindset about providing children the opportunities to learn and grow through active playful learning.

Why Active Playful Learning

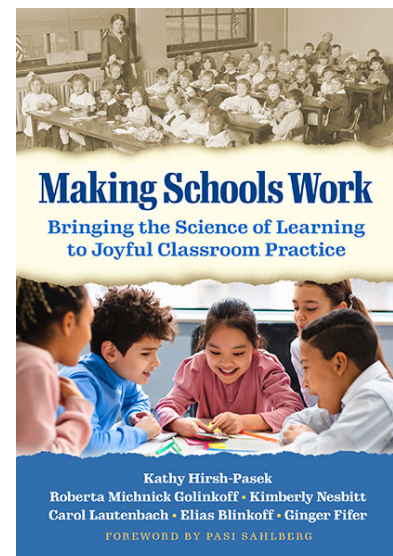
Through correlational and experimental research, the science of learning indicates that **students learn best when they can be active and engaged in learning that is meaningful, socially interactive, iterative, and joyful** (Hirsh-Pasek et al., 2015, 2020; 2022; Yannier et al., 2021; Zosh et al., 2018, 2022; Skeen et al., 2022). That is, learning works best when children engage in playful learning. In the U.S., however, playful learning in the early years of school (prekindergarten to grade 4) is not universal. Moreover, this misalignment between educational pedagogy and the skills children need is particularly concerning for children from under-resourced and minoritized communities. Lack of access to efficacious learning experiences contributes to growing inequities and to making schools dull and boring.

Developed through partnerships among educators and researchers, the Active Playful Learning method is grounded in both classroom experiences and the latest science of learning. The approach is about *how* students learn best, *what* skills are generalizable and relevant for today's interconnected world, and *what makes* learning stick. As documented in [***Making Schools Work: Bringing the Science of Learning to Joyful Classroom Practice***](#) (Hirsh-Pasek et al., 2022), the method has shown initial positive impacts, with demonstrations of the feasibility of the method's approach to positively impact teacher behaviors and acceptance. The Active Playful Learning method is NOT a scripted curriculum, It empowers educator agency while maximizing inclusivity and sensitivity to cultural values.

Foundational Reading

All Active Playful Learning Coaches are required to read the following book as it is a cornerstone of the strategies that teachers will supported to use. The book's content will be covered and expanded in coach training.

Hirsh-Pasek, K., Golinkoff, R. M., Nesbitt, K. T., Lautenbach, C., Blinkoff, E., & Fifer, G. (2022). Making schools work: Bringing the science of learning to joyful classroom practice. Teachers College Press. <https://www.tcpres.com/making-schools-work-9780807767382>



Theory Of Change

The Active Playful Learning method is built on a three-part foundation (Figure 1) that is fundamental to the science of learning:

- First, education and schooling should be situated in a cultural context that is consistent with and respects the values and practices of a diverse community and their children, families, and educators. This not only strives to make learning more meaningful for children but also supports school and home alignment.



- Second, because the brain learns best when it is actively engaged, learning meaningful material in a socially interactive context that is joyful, playful learning allows the way we teach to mirror how children learn.
- Third, around the globe, curricular outcomes of choice have narrowed to reading and math to the exclusion of a breadth of skills approach. Our model supports the scientifically based dynamic skills, the 6Cs, children need, including collaboration, communication, content critical thinking, creative innovation, and confidence (Golinkoff & Hirsh-Pasek, 2016; Hirsh-Pasek et al., 2020; 2022).

Part 1: The Inclusion of Cultural Values

A considerable body of knowledge demonstrates the value of bridging between home and school by considering the funds of knowledge that students bring to their education (e.g., Moll et al., 1992). These funds include beliefs, values, and practices that can travel easily between contexts, thereby strengthening the learning that happens at school and within the home (Hogg, 2011). By way of example, the program *Food for Thought* had positive impacts on Latine children’s vocabulary and executive function skills of attention and impulse control through discussion of food routines (Leyva et al., 2021). When community voices are respected and validated through their representation in classroom curricula, children feel included and thrive.

Part 2: How We Learn

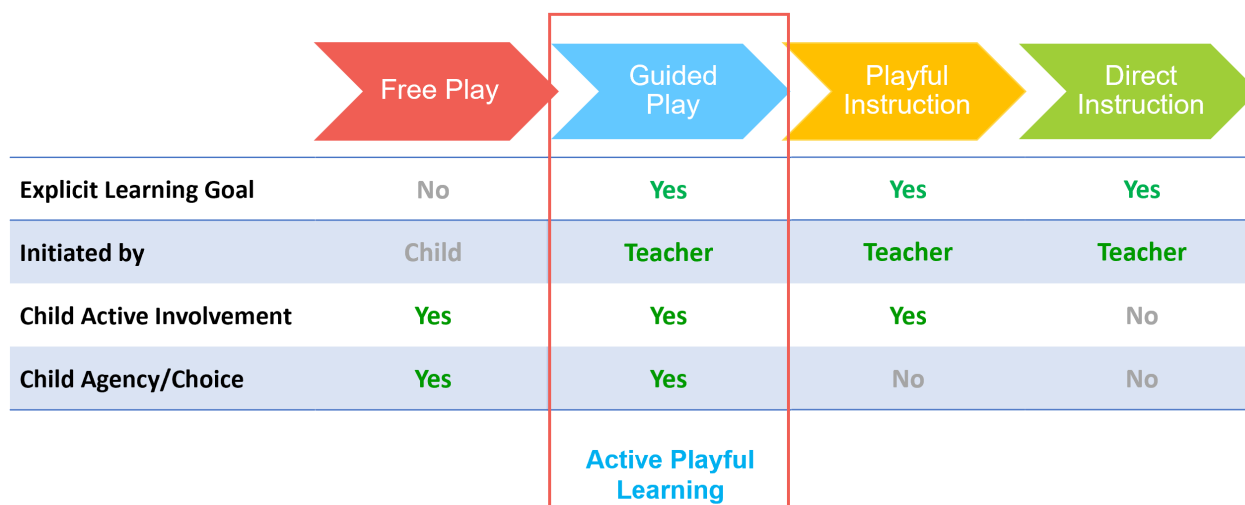
With community values in place, we can then overlay the science of how children learn, regardless of the content area. After investigating the science of learning and development for over 50 years (e.g., Bransford et al., 2000; Darling-Hammond et al., 2020; Meltzoff et al., 2009), researchers are reaching some consensus about the experiences, strategies, and features of effective environments and interactions that promote transfer, or the ability to use new learning in new situations inside and outside the classroom. Humans learn best when they can be active and engaged in learning that is meaningful, socially interactive, iterative, and joyful. This holds in mathematics class, in reading projects, and in science and social studies. The principles of learning remain constant across subject areas.



Active, playful learning (Hirsh-Pasek et al. 2020; Yannier et al., 2021, Zosh et al., 2018, 2022) is rooted in the science of play. Play is foundational in children's lives and provides an invaluable opportunity for them to explore, practice basic skills, and experience joy. Play contributes to positive cognitive and physical development and social, and emotional well-being and supports academic skills (e.g., Ginsburg et al., 2007; Hirsh-Pasek et al., 2022; Yogman, 2018).

The active, playful learning approach provides a framework to understand how we can learn through play, with or without adult facilitation, and with varying levels of structure (Hirsh-Pasek et al., 2020; Zosh et al., 2018, 2022). We conceptualize this as a continuum from *free play* to *guided play* to *playful instruction* (Figure 1). The distinction between these three levels of playful learning is determined by whether an experience or activity 1) has an explicit learning goal, 2) is initiated by the children or an adult, and 3) is directed by children or by an adult (Zosh et al., 2018). Free play is an activity that is child-initiated and child-directed – like building a fort from pillows. No explicit learning goal is set and children play without constraints. Guided play occurs when the adult involved has a clear learning goal that they support the child to achieve. This adult facilitation can apply across a range of settings – from a well-curated classroom to a children’s museum, to any place where adults accompany children and want to help them learn something (Pyle & Danniels, 2016; Weisberg et al., 2013, 2016). The experience of guided play is unique from other activities with an explicit learning goal, in that children’s interests provide the lead. In guided play, children have agency, or freedom to construct their understanding, rather than being expected to achieve a given result in a particular way as directed by an adult.

Figure 1. Spectrum of Playful Learning





Guided play encapsulates the science of how human brains learn: when the experience is active, engaging, meaningful, socially interactive, iterative, and joyful rather than passive, distracting, and non-meaningful, children can best achieve a breadth of outcomes. **This is what we mean when we say Active Playful Learning. This is what we are striving to help teachers provide for their students.**

Reflection Questions

Can you remember what it felt like sitting in rows with a teacher who stood in front of the room controlling the learning and doing most of the talking (Direct Instruction)? Can you remember a time when you had a playful learning experience in which the teacher designed an activity that had clear learning goals but you were empowered to direct your own learning (Guided Play)? Do you have memories of playing on the school playground with friends (Free Play)? Are these distinctions between direct instruction, guided play, and free play clear to you? Do you have images in your mind of each of these concepts that help you think of the difference between them? Think about the classrooms you've seen and worked in. Did some prioritize direct instruction, and others use more guided play or free play?

A growing body of research offers evidence for a guided or active playful pedagogical approach (Alfieri et al., 2011, Skene et al., 2022; Hirsh-Pasek et al., 2022). Benefits of guided play, compared to traditional direct instruction, have been found across subject areas, including mathematics (Fisher et al., 2013) literacy (Han et al., 2010; Toub et al. 2018), and executive function skills (Schmitt et al., 2018; see Zosh & Hassinger Das, 2022, for a review). Guided play is also superior to free play if there is a curricular goal in mind (Fisher et al, 2010).

Learning is *active*, by which we mean “hands-on and minds-on” (Zosh et al., 2018). Deep, transferable understanding develops through an active process of inquiry (e.g., Cantor et al., 2019; Yannier et al., 2021) when we are the agents of our learning. Having what we call voice and choice makes our learning more powerful. Practice, application, and discussion of what we learn by

Reflection Questions

Learning is active when we have agency over and ownership of our learning. Are there times in your life where you felt joy from having ownership of your learning or from having coached a teacher to empower students as learners?



questioning, exploring, elaboration, and reflection, develop the capacity to not only recall what we learn but to also *transfer* this learning to novel contexts. When adults ask questions during a book reading (Whitehurst et al., 1994), when students can explore math problems before instruction (DeCaro & Rittle-Johnson, 2012), students remember more and think more deeply than when they are read to or given worksheets.

Learning also relies on *engagement* or focus. As early as prekindergarten, children's level of engagement is related to learning and achievement (e.g., Nesbitt et al., 2015; Portilla et al., 2014; Robinson & Mueller, 2014). Engagement in learning is supported through the modeling of learning by teachers, providing regular opportunities for active learning, and supporting students through positive feedback (Harbour et al., 2015). Engagement is supported by reducing distractions such as background noise (Schmidt et al., 2008; Ribner et al., 2021)

and classroom clutter (Fisher et al., 2014). Engaging learning experiences, with the right amount of challenge and support, build persistence and deep understanding.

Learning is accelerated when it is *meaningful* and considers our prior knowledge and cultural experiences (Gay, 2000; Ladson-Billings, 2021). When we connect new information to what we already know and our past experiences (Novak, 2002; Willingham, 2021) we achieve a deep conceptual understanding that can be applied to novel contexts and used in novel ways. In other words, emphasizing meaning supports transfer.

Learning flourishes through *social interaction*, learning from others, and others learning from us. Social learning facilitated by supportive relationships in our learning communities is the bedrock for learning and development in school and beyond. When children are provided opportunities to engage in collaboration with peers and teachers, they are more likely to engage in greater experimentation, resulting in greater learning, a finding that has been found across grades and content (e.g., Christopher & Farran, 2020; Hargrave & Sénéchal, 2000; Montroy et al., 2014; Ramani, 2012).

Reflection Questions

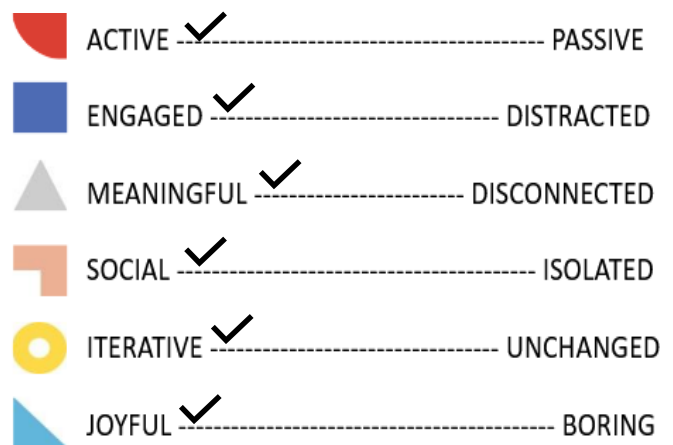
We invite you to think about a time when you were most excited and engaged as a learner and think about what made that experience meaningful for you. Did you feel ownership of your learning? What else was special about this experience? How can you extend that excitement, agency, and engagement to the teacher you're coaching and the students in your school?



Learning is also an *iterative* process, where new topics are encountered more than once. This allows children to construct the meaning of what they are learning through ongoing inquiry and experimentation. Higher-order thinking and deep expertise flow when we engage in hypothesis testing and investigations, including applying our knowledge to novel problems and developing creative solutions (Pellegrino et al., 2012; Ruggeri, 2022; Xu, 2019). Learning experiences that are well-scaffolded help us make, recognize, and resolve errors and are associated with greater learning and understanding (Metcalfe & Kornell 2007; Pan et al., 2020).

Learning is also more likely to stick when it is *joyful*. The emotional climate of our classrooms is associated with how much students learn (e.g., O'Connor, 2010). Positive emotional techniques to engage students are associated with greater learning gains across elementary school for both math and literacy (Pianta et al., 2008). When learning is fun, we are more motivated and less stressed (Bisson & Luckner, 1996; Zosh et al., 2018). Positive emotional states are related to better cognitive performance across our lifespan (e.g., Blair 2002). Research suggests that positive emotions foster flexible thinking which in turn contributes to creative thinking and discovery (Fredrickson, 2013). Together, these characteristics form the basis for what we call active, playful learning.

The Active Playful Learning method aims to increase opportunities for guided play which has an explicit learning goal initiated by the teacher but is directed by children. We seek to help teachers create lessons and experiences that are active, engaging, meaningful, social, iterative, and joyful rather than passive, distracting, disconnected, isolating, unchanging, and boring.



Part 3: What We Need to Learn – The 6 Cs

The acquisition of traditional academic content knowledge like mathematics, literacy, social studies, and science is central to how we define success. But so too, is the acquisition of skills that portend success in school and life (McCormick et al., 2021). Thus, in addition to developing *content expertise*, we must consider the development of characteristics like *collaboration* and *communication* with others, *critical thinking*, *creative innovation*, and building *confidence* to take calculated risks. These skills, grounded in science, are what Golinkoff and Hirsh-Pasek (2016, Hirsh-Pasek et al., 2020) call the 6 Cs (Figure 2). The 6 Cs are sharpened throughout the lifespan. Knowledge of content per se is necessary but cannot be guaranteed to provide personal or professional success. Children need to acquire this full suite of skills and adults can assist them with effective scaffolding and guidance (Bailey et al., 2020).

Figure 2. 6Cs Checklist

| |  |  |  |  |  |  |
|---------|--|--|--|--|--|--|
| Level 4 | Building it together | Tell a joint story | Expertise | Evidence | Vision | Dare to fail |
| Level 3 | Back and forth | Dialogue | Making connections | Opinions | Voice | Calculated risks |
| Level 2 | Side by side | Show and tell | Wide breadth / Shallow understanding | Truths differ | Means-end | Where do I stand? |
| Level 1 | On my own | Raw emotion | Early learning / Situation specific | Seeing is believing | Experimentation | Barrel on |

Collaboration starts in infancy when babies recognize they need to appeal to others for what they want (Golinkoff, 1981). Social interaction blossoms into a tool for learning as children play with peers and do tasks together. It begins with *contingent interactions* when caregivers respond to infants’ behaviors like pointing or reaching and provide the information or object that infants want (Golinkoff, 1981; Masek et al., 2020national). These interactions lay the foundation for children’s eventual collaboration between peers and teachers (Masek et al., 2022). Establishing



joint goals gets easier and easier as children interact with others and learn to negotiate and compromise. Throughout school, our understanding of joint goals develops (Young et al., 2019) and with experience, we can learn to effectively build relationships and cooperate with others to meet those joint goals (Hertz-Lazarowitz et al., 2013).

To collaborate effectively, we must *communicate* effectively. Serve-and-return conversations between adults and children, also called “conversational duets” (Hirsh-Pasek et al., 2015), are essential for developing communication and language skills. Then at home and especially in school, we build our vocabularies, syntactic knowledge, and expressive language skills, and learn to communicate through speaking and writing (Cunningham & Stanovich 1997; Dickinson & Porche, 2011). With the ability to talk, read, and write, we can communicate our thinking to others, understand others’ thinking, and engage in dynamic interactions with others that can lead to novel discoveries and produce greater understanding. Communication also involves listening as children take in what their peers and teachers offer. Listening is often not easy when children have their own ideas in mind that they are eager to share.

Content is learned through collaboration and communication. Content includes the core academic subject areas of literacy, science, mathematics, and social studies. The 6 Cs framework highlights the need not only to teach content but also for students to go beyond superficial understanding and continue to refine the meaning and depth of their content knowledge. (Golinkoff & Hirsh-Pasek, 2016). Consider an example from language. To a child, the word “justice” might mean sharing in equal parts; however, by adolescence, children recognize that a concept like justice is nuanced and has a deeper meaning that requires deeper knowledge of concepts such as equity and equality (Hadley et al., 2016). As content increases in breadth and depth, children are empowered to find, analyze, synthesize, and apply their expertise to solve new problems.

Critical thinking is built on content. The ability to evaluate information is an essential skill for success in school and life. We develop critical thinking by encouraging ourselves and others to ask questions, be curious, and engage in inquiry in which we develop and test hypotheses to solve problems and synthesize, generate, and communicate explanations (Ennis, 2015; Facione & Gittens, 2016). As with all the 6 C’s, these skills are used in all contexts – from school to home to the playground. Formulating questions is important for children to learn and will help them find their voice.

Creative innovation also requires content expertise. Only when we understand how something works, can we start to think of how we might improve it. Consider the history of any modern household appliance as a story of creative innovation. Critical thinking and creative innovation



are nurtured by supporting curiosity (Jirout, 2020). Building on our interests and experiences can lead to exploration that brings about a deeper understanding and new creative outcomes (Gopnik & Wellman, 2012; Stricker & Sobel, 2020). Creative innovation is necessary in all walks of life and is what makes us different from computers. Any entrepreneur or inventor can recount stories of how they initially failed but persevered.

Confidence is what gave those entrepreneurs and inventors the ability to keep going and learn from their mistakes. Stopping after a first unsuccessful attempt will not promote effective problem-solving. Confidence allows us to take calculated risks, and cultivate a *growth mindset* (Claro et al., 2016; Hamovitz & Dweck, 2017) and *grit* (Duckworth et al., 2007) to persist despite failure.

Reflection Questions

The 6 Cs: Collaboration, Communication, Content, Critical Thinking, Creative Innovation, and Confidence not only help students learn but also help adults grow in their teaching. Can you think of experiences in your own life that require high levels of collaboration, communication, content expertise, critical thinking, creative innovation, and confidence? What makes these experiences unique?



3. APL TEACHING PRACTICES

Active Playful Learning (the pillars of active, engaging, meaningful, socially interactive, iterative, and joyful learning) is achieved by supporting teachers' ability to:

- Use small groups and dyads.
- Increase students' contributions to interactions with peers and teachers.
- Support hands-on and minds-on exploration, discovery, and inquiry.
- Give students choice and voice in their own learning.
- Help students connect their learning to other experiences both in and out of school.
- Infuse enthusiasm and positivity into learning experiences.

These 6 APL Teaching Practices become the central focus of coaching, with teachers and coaches setting actionable goals to support these practices. Additional information about how the coaching process supports these practices is provided in Section 6.

Active Playful Learning Ideas for Teachers

To further help teachers identify specific practices, APL has created a list of 20 specific ideas or strategies that align with the APL Teaching Practices and Pillars. Two versions of these ideas for teachers are available, one organized around the 6 APL [Teaching Practices](#) and one around the 6 [APL Pillars](#). Below we provide the list of the 6 APL Teaching Practices.

Use **small groups and dyads**.

- Incorporate small groups and dyads to allow students to work together.
- Provide students with tasks where they must work together to meet goals or solve problems.
- Encourage students to explain their thinking and understanding to each other.
- Support the development of prosocial behaviors in your students to allow for positive interactions among classroom members.

Increase **students' contributions** to interactions with peers and teachers.

- Have discussions where students contribute to the conversation as much as you do.
- Ask and be responsive to open-ended questions, including questions that require students to explain their understanding.



Support **hands-on and mind-on** exploration, discovery, and inquiry.

- Add hands-on tools to activities so students can create and show their understanding.
- Encourage students to engage in experimentation and exploration to develop and transfer their understanding to novel problems.

Give students **choice and voice** in their own learning.

- Offer students choices in the approaches they use to explore ideas and show their understanding.
- Provide tasks with more than one solution or allow for more than one method or approach. Encourage students to find more than the first solution they reach.
- Give individualized support and instruction to help meet students where they are.
- Have students set goals, including developing plans and reflecting on their progress. Research tells us that students learn more when they set goals either alone or with peers.

Help students **connect their learning** to other experiences both in and out of school.

- Find ways to incorporate students' interests and connect learning to their lives inside and outside of the classroom to make learning culturally responsive.
- Share with students the purpose of what they are learning and how it relates to their lives. Ask them to tell you how the topic will be useful to them. This will help situate their learning.
- Revisit prior learning to help students connect their knowledge with what they are currently learning. It will help them remember what they have learned.
- Create experiences that integrate instruction across subject and content areas.

Infuse **enthusiasm and positivity** into learning experiences.

- Model excitement for learning and discovery, including the delight of personal connections with students.
- Provide students with opportunities to express themselves.
- Support a love for learning by celebrating everyone's growth, effort, and curiosity in learning, including your own.



Reflection Questions

Imagine yourself in a team meeting with a colleague talking about APL. How would you describe APL? What might you tell her/him about what you've noticed and wondered?

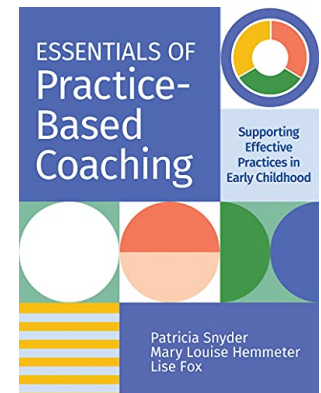
Imagine you are supporting a teacher trying to move away from teaching a lesson via whole group direct instruction. How might the APL method help this teacher enhance their practice?

4. APL COACHING MODEL

Foundational Reading

APL coaching uses a Practice-Based Coaching (PBC) framework based on the science of coaching. The book's content will be covered and expanded in coach training.

Snyder, P., Hemmeter, M. L., & Fox, L. (2022). *Essentials of practice-based coaching: Supporting effective practices in early childhood*. Brooks Publishing.



Coach Qualifications and Competencies

Qualifications

- Bachelor's degree in education, special education, social work, human/child development, or a related field is required. A master's degree is preferred.
- At least 5 years of relevant experience

Competencies

Ethical Standards

- Understands and consistently applies a Code of Ethical Conduct
- Exercises cultural humility and responsiveness
- Demonstrates professional conduct
- Maintains confidentiality of data and other information collected as part of the coaching process

Communication Skills

- Establishes and maintains trusting and collaborative partnerships
- Uses effective questioning and constructive feedback
- Remains focused, observant, empathetic, and responsive within partnership interactions
- Reflects or summarizes what is communicated to ensure clarity and understanding
- Uses appropriate and responsive tone, body language, and words to express messages



- Provides clear, articulate, and direct communication of objectives, feedback, and recommendations

Evidence-based Coaching Model

- Jointly creates effective coaching arrangements and schedules
- Co-designs individualized goals that integrate and expand new learning
- Conducts focused, direct observations around targeted practices
- Possesses skills in assessment and documentation
- Supports reflection and provides feedback to teachers
- Identifies effective and evidence-based strategies related to successful coaching experiences

Ongoing Professional Development

- Seeks further education to build upon own coaching skills
- Maintains an awareness of current research and incorporates it into coaching practices
- Hones and refines coaching skills through self-assessment and collaborative reflection with other practitioners

Coaching Framework

APL utilizes the Practice-Based Coaching (PBC) empirically based coaching framework. The PBC framework highlights the importance of a collaborative coaching partnership between a teacher receiving coaching and the coach. Together the teacher and coach focus on specific APL practice (see Section 3) and engage in an interactive and cyclical process of:

- (1) assessment of needs and strengths
- (2) sharing goals and action planning,
- (3) focused observation, and
- (4) reflection and feedback about practices.



Overview of Key Elements of APL Coaching

Content

Coaching has been shown to be more effective when it is paired with workshops to provide foundational content knowledge and when coaching focuses on specific practices and skills (Blazer & Kraft, 2015). All teachers will attend a 2-day in-person workshop. The workshop introduces key elements of APL (see Section 5).

Delivery Method

APL coaching is based on the premise that educators hone their practices through their daily interactions with colleagues, students, and families. When professional development is connected to the teacher's classrooms it will yield lasting change. As such, coaching is individualized and embedded within a teacher's classroom and provides the context needed to support teachers to refine and improve their instructional practices by meeting them in the unique conditions in which they teach. Teachers also engage in in-person workshops before embedded coaching commences. However, the key method for facilitation of changes is the embedded classroom coaching visits (see Section 6).

Duration

Examination of specific components of teacher coaching programs suggests that the impacts of coaching are more dependent on the quality of the coaching experience rather than the dosage. There are inconsistent findings for dosage with some finding no association (Kraft et al., 2018; Kennedy, 2016). However, others have found positive effects when contact hours meet a minimal threshold (greater than 14 contact hours). (Dunst et al., 2015; Yoon et al., 2007). For APL, the program is 7 months in duration with the expectation of a classroom visit every two weeks with each visit lasting 1.5 hours (see Section 6 for more information on the expectations of visits).

Partnership/Relationship

Coaching is collaborative in that the coach and the teacher work together to define and carry out the partnership by creating goals and strategies to reach those goals. These are professional relationships. The coach and teacher bring their specific expertise to the partnership. The coach brings the expertise of APL, and the teacher brings the expertise from their experiences teaching. The coach and teacher's knowledge and experiences are equally respected and considered relevant to the coaching process.



Strengths and Needs Assessment

The process of shared goals and action planning is based on a needs and strengths assessment completed by the coach through observations of classroom practices and discussions with the teacher. Teachers complete an initial survey to document their perceptions of their strengths and needs regarding APL teaching practices. Coaching begins with initial visits that focus on getting to know the teacher and their classroom (see Section 6).

Support from School Administrators and Staff

It is crucial that teachers feel supported by the staff in their schools who monitor what goes on inside their classroom. Teachers need to feel that they have the freedom to fully engage in the APL pedagogy, without concern that they may not “get to” other activities and goals their district may be asking for. The APL Central Team will work with administrators to ensure teachers receive this support and feel totally comfortable implanting APL.

Administrators will also receive training on APL and how, while it can transform classrooms, it can also reach the goals that they have set for their schools. The logistics and goals of the support for administrators are currently in development, including the degree to which coaches will facilitate this process.

Family and Community Engagement

As central tenant of APL is the bridging between home and school by considering the funds of knowledge that students bring to their education. Reflected in the APL practice to “help students connect their learning to other experiences both in and out of school”, coaches work with teachers to ensure that they are in communication with families as a way to ensure the APL pillar of Meaningful is supported. Resources to support this are in development.

Shared Goals and Action Planning

Coaching is focused on the desired APL practices (Section 3) and outcomes identified collaboratively by the coach and teacher. Through the goal-setting process, coaches will engage in such practices as:

- Ask open-ended questions to help the teacher identify a new goal.
- Restate the goal and action plan steps using clear, observable descriptors.
- Give hints and examples to help the teacher develop measurable criteria for completion.
- Ask questions to help the teacher clarify action steps and criteria.
- Provide verbal and nonverbal encouragement.



Shared goals should focus on (1) a specific APL teaching practice that supports student learning and (2) the strategies and resources that support the teacher's confidence and competence to use these practices. Goals should be specific, observable, and achieved within 2 to 4 weeks (see Section 6).

Focused Observation

APL coaches engage in ongoing focused observation of teachers' classrooms. Observations are guided by the shared goal. Observations are used to gather information about APL practices and strategies as they are being implemented in the learning experiences curated by the teacher. Coaches record personal notes and provide ratings about progress toward identified goals to help plan the feedback to be shared and are used to develop strategies that may help improve the teacher's APL practices.

Lesson Planning Resources

Exemplar Lesson Plans. While APL practices can be applied across all content areas, to most effectively scaffold the integration of the practices into a teacher's existing curriculum, coaching will first begin with a focus on integration into mathematics. To assist with this process, APL has created an online repository of lesson plans based on the existing curriculum and standards of the districts engaging in the APL project. This repository is available through the [APL website](#). The lesson plans are designed to provide small additions or edits to existing plans to make lessons more active, engaging, social, meaningful, iterative, and joyful. Coaches and teachers can rely on the plans for practical solutions and inspiration on how to add APL to their current teaching. When identifying modifications to employ, the teacher and coach should focus on the teaching practice that aligns with the goal identified (see section 6 for more information on this process)

These plans are designed to align with the content being covered at the beginning of the school year as the expectation is that modifications to lessons later in the school year will transition to being under the direction of the teacher with support from their coach.

[Lesson Planning Template](#). To help support teachers and coaches to engage in the process of modifying existing lesson plans, teachers and coaches can utilize the APL Lesson Planning Template. The document contains questions to spur ideas for modifications based on the APL practices. When discussing modifications, the teacher and coach should focus on the teaching practice that aligns with the goal identified.



Resource Library. APL supports a continuously growing library of resources organized around the 6 APL teaching practices and tagged with the 6 APL pillars. This resource is accessible through the [APL website](#). Resources are currently in development and will be updated on the website on an ongoing basis.

Student Behaviors Continuum. When designing lessons, it can be helpful to consider how modifications impact student behaviors. APL has developed a continuum of student behaviors a coach and teacher could use to gauge impact as part of their work together.

Reflection and Feedback

All observations are completed with a debriefing session between the coach and teacher where they reflect on the implementation of APL practices as aligned with their set goal. See Section 6 for more information on this process including the coaching logs to be utilized by coaches and teachers to document and track the evolution of coaching supports and goals.

Reflection Questions

A collaborative coaching partnership is key to making real, lasting change. Is the coaching model you read about above the one you've already been using? If so, what success have you had with the model? If not, what's the same and what's different from what you did in the past?



5. APL TEACHER WORKSHOPS

Before the onset of embedded coaching visits, all teachers will participate in a 2-day in-person workshop to learn the foundational APL content (see Section 2). Each workshop is individualized to the district and state’s learning standards and curriculum. Examples provided throughout the workshop are designed around grade-level standards and can be the curriculum used to support the standards. As such, preparation for the workshop requires coaches to complete an in-depth review of the standards and curriculum before implementation.

Below is an overview of possible content to be covered in the workshop and suggested activities. This is not an exhaustive list. PowerPoint presentations, videos, discussion prompts, and small group breakout activities will be co-developed and delivered by the APL centralized team and site coaches.

o **Opening Group Activities**

- o Reflection on current practice. Small group discussion (~ 4 participants) followed by large group sharing. **Discussion Prompt:** Please share an activity, lesson, or experience that you feel was particularly beneficial to your students’ learning. Why was this activity so beneficial? What did your students learn? How did your student engage in the activity? What was your role in supporting your student’s learning?
- o Engaging in an APL mathematics activity. An array of options will be developed. An example activity includes:
 - **Number Line Exploration.** Using tape on the floor a number line is made with only the endpoints labeled with 0 and 100. The presenter walks the teachers through a series of prompts to elicit their teachers’ knowledge of number lines. They are then given a number and instructed to find their place on the number line without showing anyone their number. With different prompts, the presenter asks how different individuals identified where they should be and asks them to ask one person their number to confirm if they are in the right place. Numbers are revealed and placed on the line based on where they are currently standing, and the conversation turns to discussing the distance between numbers. Further extended by changing the endpoints and discussing how that impacts their placement on the number line. Discussion of real-world examples of number lines is discussed (e.g., planning a game with levels, finding your assigned seat by finding your row). For older grades number line could be 0 to 1



○ Introduction Content: The importance of the early years

- More learning happens in the early elementary years than at any other time in a student's K-12 schooling. This learning sets a foundation for the future. Slides will illustrate standardized gains across grade levels (Bloom et al., 2008) and highlight that about 76% of the total change in math scores from this timeframe occurred by grade 1 and nearly 100% by grade 3 (Pianta et al., 2008). Similar effects were found for reading with 80% of the total change in reading scores occurring by grade 1 and 98% occurring by grade 3 for typical readers.
- Growing concerns of the pushing “academicization” of the early grades with a growing narrow focus on literacy and mathematics instruction. Slides to highlight how students spend their school day by content area and group setting. Data to highlight the frequency of children talking, collaboration, and participation in child-directed experiences by grade.
- Small group discussion (~ 4 participants) followed by large group share out.
Discussion Prompt: How have you seen the expectations (positive and negative) of your practice change over the past year, 3 years, or 5 years? What do you think are the reasons for the changing expectations and how has it impacted the learning environment and experiences you provide your students?

○ The science of how children learn

- Content will focus on defining active playful learning (APL) which aims to enhance students' learning through intentional instruction that harnesses the intrinsic motivation and autonomy common to play with the guidance and facilitation of a teacher. The focus will be on guided play, including defining it within a broader section of instructional approaches (ranging from free play to direct instruction). Summary of research of associations between guided play and children's learning to be shared.
- **Video reflections:** Video illustrations of different learning approaches (e.g., free play, guided play, playful instruction, and direct instruction) will be presented. Teachers will be asked to identify the type of activity based on 1) the presence of a learning goal, 2) teacher vs. child-initiated, and 3) teacher vs child-directed. Teachers will rate videos based on their view of the degree to which the experience was active, engaging, meaningful, socially interactive, iterative, and joyful (a rubric will be provided). As a follow-up teachers will work to redesign these lessons to increase the presence of APL principles. This activity is optimal to complete in small groups activity or dyads.



- **Activity:** Let's Build Ducks. Using a defined set of 6 LEGO blocks teachers are walked through four different scenarios. 1) Free play – teachers are given the LEGO but no defined learning goal is presented. 2) Guided play – teachers are prompted to use their blocks to “build a duck” (the learning goal). They can construct their duck however they like. 3) Direct Instruction – hands off the blocks. Teachers must watch as one of the presenters tells them how to build a duck. 4) Playful instruction – they can now use their blocks again, but they must build their duck to look just like the presenters. The merits and drawbacks of different approaches are discussed.
- **Discussion prompts:** How do you think play and learning are related? How have you seen play manifesting in your classrooms to support learning? How are you currently using the principles of APL in your classrooms? What alignment do you see between the principles of APL and your goals and vision for students?

- **The science of what children need to learn**
 - The content for this section of the workshop is found in section 2 of the manual. Content will focus on the need to teach content expectations/standards (e.g., mathematics, literacy, science, social studies) while at the same time, helping students develop expertise that will allow them to transfer knowledge to novel contexts. Moreover, this part of the workshop will highlight the need to also nurture a breadth of domain-general skills that children apply across content areas. These skills include collaboration, communication, critical thinking, creative innovations, and confidence and are needed to help children communicate transfer their knowledge, create new and deeper understandings, and have the self-efficacy needed to try to solve novel problems. In the APL framework, these skills are organized under the concept of the 6Cs (see section 2).
 - **Discussion Prompt:** Teachers can be presented with a 6C rubric and asked to reflect on their own 6C skills across an array of topics and content areas.

- **Designing APL experiences**
 - The content will cover how APL is supported through the five targeted APL teaching practices (Section 3) which in turn support the APL pillars (active, engaging, meaningful, social, iterative, and joyful).
 - **Group discussion:** Have teachers look at the practices targeted by APL (section 2) and reflect on their own perceived strengths and challenges.
 - **Small group activities:** Teachers will identify learning standards related to mathematics and develop lesson plans that integrate an identified APL practice. This is a substantial part of the workshop; coaches work with teachers to design and



refine lessons. Teachers should be encouraged to identify lessons from their current curriculum they can refine or extend based on the APL principles.

○ **Developing APL Environments**

- Content will include how to develop a planned play environment, enriched with objects that provide experiential learning opportunities, and infused with curricular content. The focus will be differentiated by grade level to reflect the different groupings and classroom arrangements seen across grade levels. APL is designed to enhance what teachers are currently doing in their classrooms.
- **Discussion prompts:** What are current environmental barriers you see in being able to design for and implement APL experiences? In what ways can we balance the need to “implement to fidelity” current curricula and the desire to implement APL into our classrooms?

○ **Facilitation of APL: The role of the teacher**

- Content will include how adults enhance children’s exploration and learning through collaboration with children by asking open-ended questions and suggesting ways to explore and extend. Great focus will be placed on the use of open-ended questions and how to follow children’s lead as they construct the “right “answer in their own way. With a truly open-ended question there is typically not one right answer.
- **Discussion prompts:** What do you see now as your role in helping ensure APL is effectively used to support students’ learning?

○ **Establishment of Coaching Partnerships.** Time should be dedicated at workshops to facilitate the practical consideration of the coaching partnership.

- Inform teachers about what they can expect from the coach and what is expected from teachers. It helps make the purpose and focus of coaching clear.
- Review of the coaching process (see Section 6).
- Scheduling of mutually agreed upon dates and times of initial coaching visits.

6. APL COACHING PROCESS

Preparation

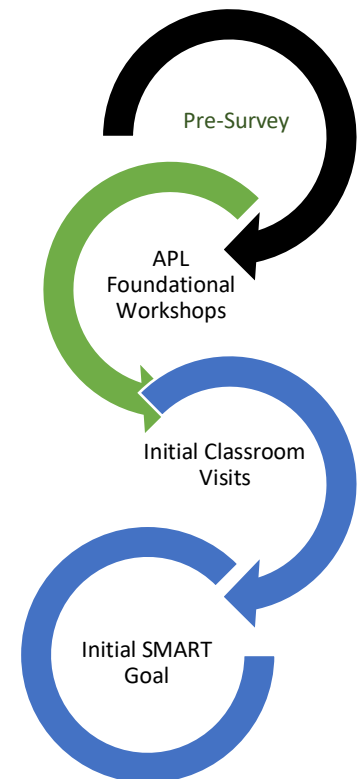
The coaching process begins with setting a strong foundation for the coaching partnership. This includes:

Teacher Pre-Coaching Survey. Aim to gather foundational information about the teacher, including their perceptions of their strengths and needs regarding APL practices. The information from this will be shared with coaches to help facilitate the coaching process.

APL Foundational Workshops. See Section 5 for information on content covered in the workshops.

Initial Classroom Visits. The initial visits are foundational to building a trusting relationship and includes important components that set the stage for beginning to establish a collaborative partnership. It begins with establishing rapport and shared understandings emphasizing the need for open two-way communication and identifying the coaching as a process being done *with* teachers not *for* or *to* them. Sharing professional experiences and backgrounds; establishing shared expectations; and/or creating a mutual understanding of different facets of the coaching program are examples of ways to ignite this connection between coach and teacher. As such, in scheduling this meeting every effort should be made to accommodate the teacher’s schedule. The coach prepares for this meeting by reviewing the pre-coaching survey.

The goal of the initial classroom visit(s) is to get to know the classroom, teacher(s), and children. There are two parts to the visit as documented in the [Initial Classroom Visit Form](#) (a required form to be completed at each initial visit): 1) observation of classroom practices and 2) visit reflection. **The initial visits should last about 1 hour and about 30 minutes and should be dedicated to reflection.** The visit reflection is completed in collaboration with the teacher and aims to initiate thoughts on the teaching practices to possibly target in coaching.





As an observer in the classroom, you should focus on:

- Identifying strengths to build on through coaching.
- The practices targeted by APL and that might be supported through coaching.
- Providing specific details to support observations the coach noticed, including the language heard or behaviors seen.

Development of Initial S.M.A.R.T. goal. The first step in the coaching process is to identify a goal. S.M.A.R.T. goals are **S**pecific, **M**easurable, **A**ttainable, **R**elevant, and **T**imely. SMART goals should target specific APL practices (section 3). Typically, the timeframe to accomplish a goal should be 1 to 2 months. However, it is understood that discussion around these goals is ongoing, and goals should be revisited and revised as necessary.

The SMART goal should directly align with one of the 6 APL Teaching Practice (Section 3). The goal will most likely impact multiple APL pillars (Active, Engaging, Meaningful, Socially Interactive, Iterative, Joyful) and 6C student outcomes (Communication, Collaboration, Content, Critical Thinking, Creative Innovations, Confidence). There is a required [S.M.A.R.T. Goal Planning Form](#) to be completed by the coach and teacher to identify, plan, document, and reflect on a teacher's goals for incorporating APL practices into their classrooms.

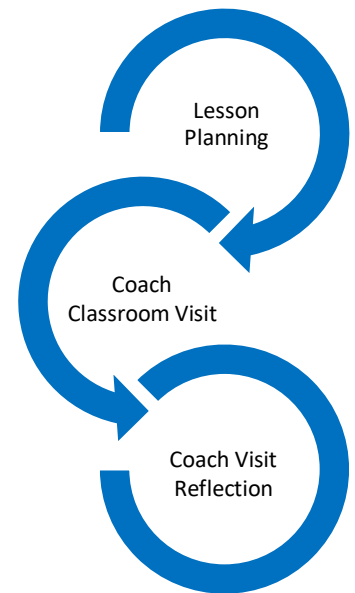
Coaching to Support the Selected Goal

Once a SMART goal is established, the coach visits a classroom every two weeks. In total, a coach should have about 1.5 hours of direct contact with a teacher. This time should be dedicated to supporting teachers in 1) planning APL lessons, 2) visiting the classroom, and 3) reflecting on progress. This two-week cycle is repeated over the course of the school year.

Below are suggested estimates of how much time should be dedicated to planning, visits, and reflection. There is however, flexibility in this allocation based on the unique needs of the teacher.

Lesson Planning

Coaches and teachers collaborate to identify how existing lessons can be enhanced to include APL teaching practices (Section 3). Depending on the needs of the teacher, coaches can decide how best to allocation of the 1.5 hours every two weeks dedicated to a teacher. See Section 7 for recommendation on how to scaffold the process of lesson





planning and implementation. There are several resources available to coaches and teachers to support APL lesson planning:

- **Exemplar Lesson Plans.** An online repository of lesson plans based on the existing curriculum and standards of the districts engaging in the APL project. This repository is available through the [APL website](#).
- **Lesson Planning Template.** To help support teachers and coaches engage in the process of modifying existing lesson plans on their own, they can use the APL Lesson Planning Template. This document contains questions to spur ideas for modifications based on the APL practices. When making modifications, the teacher and coach should focus on the teaching practice that aligns with the goal identified. It is not a required form, but it is encouraged since it will facilitate modifying existing lessons.
- **Resource Library.** APL supports a continuously growing library of resources organized around the 6 APL teaching practices and tagged with the 6 APL pillars. This resource is accessible through the [APL website](#).

Classroom Visit

A classroom visit is expected to be about an hour of the 1.5 hours dedicated to a teacher every two weeks. The coach and teacher select a time in the schedule of the day in which students will be actively engaged in math. The day of the week of visits should vary over the school year to account for differences in how activities might look depending on the day of the week.

For each visit, coaches are required to complete the [Coach Observation Form](#). This form is the way that APL documents progress toward the identified goal being targeted in the visit. Directions on how to complete the form are provided on the form.

The focus and plan for each observation visit are determined and mutually agreed upon during goal setting at the previous meeting or through communication between visits. The coach arrives prepared to follow through with this pre-determined plan yet is flexible to adjust the focus upon the request of the teacher. It is important that the coach and teacher both know and have agreed upon exactly what the coach's role is upon entering the classroom. This allows the coach to enter the classroom seamlessly and without disrupting what might be happening. The visit might include any of the following, a combination of them, or something different identified by the coach and teacher:

- direct observation of classroom interactions.
- direct modeling of a specific practice such as teacher language.
- demonstrating a portion of the planned lesson.
- documenting children's engagement and learning through photographs and note-taking.



- offering side-by-side coaching.
- providing verbal prompts.
- offering quick suggestions.
- collecting data on specific teacher practices.
- modeling the creation of an APL activity.

Visit Reflection

All efforts should be made to hold the visit reflection as soon after the classroom visit as possible. This will require careful planning and perhaps the involvement and support of the administration. The debriefing meeting is a time to communicate about progress and challenges and make plans for future meetings and observations. This meeting includes reflection and sharing feedback, planning action steps, and revisiting previously established goals and/or setting new ones. In collaboration with the teacher, the coach is required to complete the [Classroom Visit Reflection Form](#).

Reflection is intended to be a dialogue in which both coach and teacher share. The coach may open the discussion by inviting the teacher to share reflections from the time since the last visit using an open-ended question such as, “Tell me about how _____ has been going since my last visit.” It is important to be sure both successes and barriers to implementing a strategy are brought forth, elaborated upon, and addressed in order that they can work together to come up with possible solutions, changes, or approaches to try next time. The coach then shares reflections and specific observations for their time in the classroom that relate to the predetermined goal. There may be other observations the coach identifies as significant and wants to share with the teacher.

Feedback is given to the teacher as they share reflections. The coach should be offering a combination of supportive and constructive feedback. Supportive feedback acknowledges the teacher’s use of APL practices that are connected to the identified goal. Constructive feedback is offered to support the teacher in finding areas in their practice that they might fine-tune and expand upon. It should offer guidance for possible changes or adjustments to be made and help to inform goals and action plans for the next steps. This combination of both types of feedback provides the teacher with specific ways to enhance practices related to the implementation of APL.

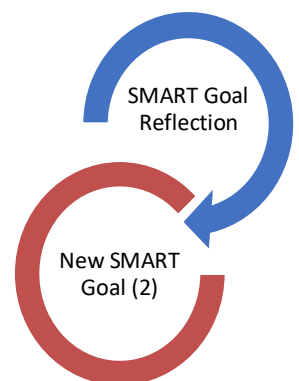
Key Connections for APL Coaching Feedback

To support teacher’s ability to connect their APL Teaching Practice to the holistic approach that APL is designed to have, feedback should help teachers see how their efforts to change their practice impact children’s outcomes (the 6Cs of Communication, Collaboration, Content, Critical Thinking, Creative Innovations, Confidence) as well as the APL pillars (Active, Engaging, Meaningful, Socially Interactive, Iterative, and Joyful).

Identifying a New Goal

It is expected that a teacher’s goal will require multiple cycles of planning, visits, and reflections. When reflecting on progress towards an identified goal, coaches and teachers need to consider the progress being made and whether a goal has been met. If both the coach and teacher feel a goal has been met, the [SMART Goal Reflection Form](#) needs to be completed. This is a required form.

Once a SMART goal is met and the reflection form is completed, a new goal is established and the process of planning, visits, and reflection is repeated with the focus not on this new goal. The teacher and coach are required to complete a new [SMART Goal Planning Form](#) must be completed.



Teacher Log

Every two weeks, teachers are asked to complete a short 2-minute [Teacher Log](#) about how the coaching process is progressing from their point of view. The log asks questions about the amount and types of contact they have had with their coach. Information about the helpfulness of APL support, potential barriers, and how much they have integrated APL into their lesson in the prior two weeks is also collected.



Mid- and End-of-School Year Reflection

Coaching is purposefully focused on specific teaching practices. It is also valuable however, to take a step-back to reflect more holistically on progress being made. As such, twice over the project (mid-school year and end-of-school year), coaches and teachers are required to complete a [Semester Reflection Form](#) which is organized around the APL pillars of Active, Engaging, Meaningful, Social, Iterative, and Joyful.



Scaffold of APL Lesson Enhancements

The APL coaching approach is designed to be more structured at the onset of implementation with scaffolds being removed over the course of the 7-month coaching cycle. As such, the initial coaching visits will rely more heavily on the coach providing suggestions for ways to integrate APL into existing lesson plans. Over the course of the coaching cycle, the process of making APL modifications will devolve more to the teacher. Below is the recommended process for gradual transition of agency to teachers.

Coach Recommended APL Modifications Over Time

In initial visits, coaches take on more of the responsibility of making suggestions for ways in which teachers can modify their lessons to integrate the APL teacher practices (see Section 3).

APL teacher practices are identified by the teacher and coach via the process of goal setting. Modifications made to lesson plans should align with the specific APL practices identified.

To facilitate the generation of APL suggestions, coaches can examine the mathematics lesson plans of their teachers. Coaches annotate modifications to the lessons using either previously create APL exemplar lesson plans or making modifications to teachers existing mathematics lesson plans (via the use of the lesson plan reflection document and suggested APL modifications previously described).

Modified lesson plans are shared with the teacher and together modifications are selected for implementation by the teacher. Teachers should implement modifications on their own and especially during the next scheduled classroom visit by the coach. Post-visit reflection should focus on the implementation of modifications. Action plans and goals for the next coaching visit should be driven by the degree to which the modifications were successfully implemented. For



example, the teacher and coach can decide to remain focused on the same APL pillars and strategies or move on to a new one.

Jointly Developed APL Modifications

After multiple visits with the coach taking the lead on suggesting modifications, the process should transition into a joint effort by the teacher and coach. There is no set number of visits that are expected to occur before this transition, it depends on the teacher's comfort level with making APL modifications and is a judgment to be made between the coach and teacher. For joint development of APL, teachers provide the plans for modification to the coach. Using the lesson plan reflection document previously described, either in-person or offline correspondence, they identify suggestions for modifications. Coaches should encourage teachers to take the lead in making suggestions for their identified modifications. Coaches can then provide feedback and resource suggestions.

Reflection Questions

All of the steps above are important parts of the coaching relationship. Time may be limited; which ones do you think are most powerful? Which may be ones to emphasize? How will you tailor the approach to the experience, strengths, and interests of the teacher?

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