12 Teachers' Early Development in Arts Integration through Creative Routines in the Classroom

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Arts integration represents an interdisciplinary approach to teaching and learning that combines learning processes and objectives in at least one arts domain and one non-arts content area (Burnaford et al., 2007). An additional objective of arts integration is creative engagement—meaningful creative learning experiences that develop students' creative resources (Anderson et al., 2020). Creative resources for learning encapsulate creative self-beliefs and attitudes, creative thinking skills, and creative behaviors (see Figure 12.1; Anderson, 2020; Lubart et al., 2013). Though this may seem like an obvious connection, creativity is not always considered in arts integration instructional design (Robinson, 2013), nor explicit in teacher training for arts integration (Anderson et al., 2022).

If teachers have not developed skills and knowledge about creative teaching and learning or identified and shifted fixed creative mindsets and self-beliefs (Anderson et al., 2022; Bereczki & Kárpáti, 2018), they may not be aware of the conditions necessary to cultivate students' diverse creative resources for meaning-making. For instance, a teacher could integrate a 3-D sculpture exercise with their unit on Greek mythology to meet learning objectives in both world history and visual arts. If the teacher leaves little room for students' autonomy in choosing their subject matter and materials or requires all students to complete the project in a representational style, the room for creative meaning-making may be highly limited. In this way, it is possible for arts integrated learning to lack the open-endedness, risk-taking, autonomy, and shared vulnerability fundamental to creative learning (Beghetto, 2016).

This chapter explores an arts integration professional development (PD) approach focused on fundamentals of teaching for creativity and creative teaching to investigate characteristics of teachers' early preparation for arts integration. This approach emphasizes teacher modeling, messaging, and reflection on key aspects of the creative self and the creative process. As this chapter explores, these tools represent powerful resources to develop students'
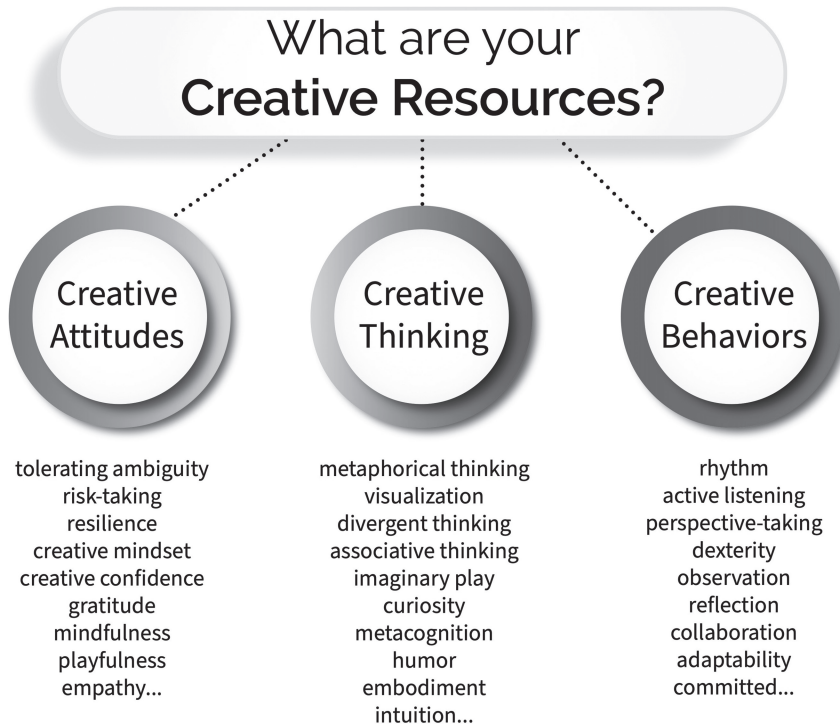
Figure 12.1 Creative Resources Framework.

growth mindset toward mistake-making and metacognition in learning (Anderson et al., 2020)—both key to creative agency in teaching and learning (Karwowski & Beghetto, 2018).

Theorizing Creative Engagement for Practitioners

Explicit links from abstract concepts to practical steps and actions are necessary for research and theory to be practical for teachers. The "Creative Engagement in Learning" framework was developed with this primary goal, incorporating the universal needs for engagement in learning from self-determination theory (SDT; Cronenberg, this volume; Ryan & Deci, 2000), principles of embodiment and metaphor (Anderson et al., 2023; Dewey, 1938; Gallagher & Lindgren, 2015), and creative development (Anderson, 2020; Lench et al., 2015). Educational psychology scholars have conceptualized learner engagement (Fredricks et al., 2004; Eccles, 2016; Ryan & Deci, 2000) as the behavioral, emotional, and cognitive outcome when three fundamental needs are met: need for relatedness, need for autonomy, and need for

competence. Creative engagement proposes a fourth component—creative meaning-making (see Anderson, 2018). By understanding creative engagement as embodied meaning-making, this framework shifts teachers' perspective on the phenomena of creative learning prior to designing and implementing arts integration.

Embodied meaning-making draws on the essential roles of both affect (Immordino-Yang, 2015) and embodiment (Gallagher & Lindgren, 2015) in learning and cognition. Several assertions bridge elements of the psychosocial learner from an SDT perspective to an emotional and embodied meaning-maker. The need for *autonomy* necessitates that learners experience time and space to *feel* and *think* through movement, gesture, and other modalities for creative meaning-making. The need for *relatedness* and *belonging* means learners feel safe to make and express meaning with others, especially in giving and receiving effort to understand novel ideas in creative learning (Beghetto, 2016). The need for *competency* necessitates the development of skilled intuitions, as Immordino-Yang (2015) proposes, that shape an emotional, embodied, and flexible orientation to learning and become habituated adaptive responses. The learner's need for *creative meaning-making* overlaps with the other needs as they develop their creative resources to metacognitively leverage in different learning contexts. These conditions can and need to be routinized in the classroom.

Why Arts Integration Needs Creative Engagement

Content-specialized teachers outside of the arts generally lack experience and training in the arts and the science of creativity in learning (Anderson et al., 2022), which can lead to arts integrated instructional design that replicates highly structured direct instruction and lacks opportunities for creative learning. Intentional focus on creative engagement deemphasizes the product of arts integrated creative learning and focuses instead on the process of students' creative thinking, feeling, and making.

Setting conditions for creative engagement is a culture-building process reinforced by routines and rituals. The creative routines in Table 12.1 align with the recommendations listed below for middle level practitioners and are key practices in this PD approach for teachers' early-stage development. To reinforce conditions, teachers can ensure students have time to interpret content in a personally expressive way. Teachers can develop student capacity to understand and build metaphors for complex and abstract concepts using different modalities. Teachers can integrate embodied practices as a learning tool, so students have opportunities to share novel, metaphoric, and embodied representations with peers. Teachers can normalize the spectrum of emotions and vulnerability experienced in learning within the classroom community.

Table 12.1 Creative Routines from the makeSPACE Model for the Classroom

Creative Routine	Description
What Do You see?	This activity practices close observation and idea generation. The class looks at an abstract shape or series of lines to find a visual story in the image. Story sharing creates opportunities to see the diversity of our perspectives, and the slow observation process develops our tolerance for ambiguity.
30 Second Persuasion	This short persuasion game gets students talking to each other without hesitation. Students respond to a prompt by building an argument in 30 seconds to try to convince their partner. Prompts can be playful, strange, or serious. Students must think on their feet, be comfortable filling time, and organize ideas based on relevance and priority.
Many Uses Game	This routine asks students to think of many possible uses for ordinary objects. This divergent thinking skill supports problem-solving across learning and life to avoid fixating on the most obvious solution.
Selfies	Students fill in a 3" × 4" card with an image, symbols, or words that represent their current state-of-being. Prompts are variations on *How are you/Who are you today?* Or *What's on your mind today? How do you feel about this learning experience?* The prompt is open-ended, with few parameters on how they represent themselves.
Vocabulary Gestures	We use gestures all the time to help us communicate without verbal language and to make sense of what we learn and experience. In this routine, students construct new and original embodied representations and metaphors to explain and describe the meaning of ideas, concepts, experiences, and vocabulary, aiding in retention.
Metaphor Card Reflections	The metaphor cards provide a diverse collection of visuals that participants can use to make associative links to complex and abstract ideas and emotions. Students can experiment with how an idea relates to a variety of images, notice increasingly subtler connections, and potentially elaborate on hidden aspects of a concept as they are revealed by a visual metaphor.
Daft Dictionary	Daft Dictionary is a concept-combination activity which helps to develop associative thinking skills within and across domains. Students randomly generate two random objects (*e.g., dragon fruit chair*), then find a bridge between them through quirky definitions of the newly invented concept (e.g., *a pastry with dragon fruit jelly on top*). Students practice associative thinking transferrable across domains.

(*Continued*)

Table 12.1 (Continued)

Creative Routine	Description
Object Story	Objects can aid us in accessing hidden memories and unimagined possibilities. This activity focuses on the object as a tool for story creation. Students select and interact with an object and find and share stories, learning from one another about their unique experiences and perspectives.
Exquisite Corpse Poems	The Exquisite Corpse Poem routine asks participants to write a poem in a circular fashion, one line at a time, inspired by only the line that was written immediately before theirs. The poem evolves piece by piece as it moves around the table. This routine can also be done as a drawing exercise, using a piece of paper folded in thirds. Each third of the drawing (often a creature) is done without seeing the other parts.

The routines in Table 12.1 meet several important parameters for young adolescent learners. They include a variety of artistic modalities. They can be flexibly adapted to integrate into any content area. They are brief and can be repeated numerous times to set conditions and build culture for creative engagement. They can be expanded and elaborated as teachers develop more skill in arts domains for more in-depth arts integration. As teachers develop agency to adapt routines to their classroom context, some important pedagogical and self-regulatory skills need development.

Pedagogical Knowledge and Skill for Creative Engagement

Creativity in the classroom is a layered phenomenon (Jeffrey & Craft, 2004) and can be conceptualized by three parts—teaching for creativity, teaching creatively, and creative learning—each with their own skills, knowledge, and practices (Lin, 2011). In reference to teaching for creative engagement with creative routines, this three-part framework provides important considerations that inform the analytic approach in this study.

Teaching for Creativity

Teaching for creativity requires giving up control, breaking down and modeling the creative process, and setting conditions for all students to engage with the inherent uncertainty and vulnerability of creative learning. Explicit teaching, messaging, and modeling of different creative resources are essential. For instance, teachers can share with students that tolerating ambiguity is important when being creative because to create something new means

there is uncertainty and may be uncomfortable. Teachers can share their own experiences with the routines they facilitate and the strategies they use.

Creative Teaching

Creative teaching requires teachers' agency to be imaginative and experimental with possibilities. It demands the willingness to trust one's intuition and take risks, to try new things and make mistakes, and to be reflective and open in the pursuit of growth (Anderson et al., 2022). Teachers' self-awareness about their creative beliefs, attitudes, and mindsets and the role they play in their creative teaching represent metacognitive knowledge key to creative action in the classroom (Lebuda & Benedek, 2023). Teachers must be willing to be a beginner and model mistake-making and vulnerability to establish safety for students to do the same with openness and nonjudgment (Orr & Kukner, 2015).

Creative Learning

Beghetto (2016) proposed a model of creative learning that validates learners' unique interpretations in relationship to others, especially when ideas diverge from what others might expect. Beghetto distinguished that c*reativity-in-learning* is when personally meaningful interpretations are made, and *learning-in-creativity* is when students' interpretations contribute to the meaning-making of others. Fundamentally, the design of creative learning should promote opportunities for students to make and express new meaning about what they learn and emphasize that there is no one "right way" (Beghetto, 2016). Creative learning should also make the underlying cognitive and affective aspects of the creative process explicit for students through routine practice and a culture of risk-taking, mistakes, and non-conformity (Anderson et al. 2020; Gajda et al., 2017).

Context of the Study

This chapter investigates the early stage of development of middle level teachers' knowledge and skill in teaching for creativity and creative teaching and learning as a preparatory stepping stone for future arts integration. Participating teachers engaged in a PD program, called makeSPACE,[1] designed to support integration of artistic and creative practices into everyday classroom learning through teachers' own creative development (Anderson et al., 2022). Within this context, I analyzed teachers' ideas and reflections to portray the early developmental stage in creative teaching for arts integration and to illustrate implications for teacher PD to address the sociocultural and developmental context of U.S. urban middle level

classrooms. In this investigation, I used thematic analyses to contextualize and understand teachers' reflections at a catalytic moment in knowledge and skill development.

Methods

This study was situated within the diverse sociocultural context of a large urban U.S. school district, where more than 80% of students in participating schools were non-White and more than 90% were socioeconomically marginalized. As such, it was important that the analytic approach in this study used a deductive-inductive balance within thematic analyses (Braun & Clarke, 2006) to ensure different cultural voices, adaptations, and interpretations emerged.

Sample

Participating middle level educators came from 12 schools in a single large urban school district in the Northeast of the United States. Ten of these schools were K–8 and two served only Grades 6–8 (students aged 10–14 years old). Of the $N = 120$ teacher participants[2], 73.3% identified as female; 21.7% identified as male; and 5.0% preferred not to share. Additionally, 1.7% identified as Asian, 29.2% identified as Black/African American, 8.3% identified as Hispanic (including those identifying with other races), 50.8% identified as White (including one person who identified as White and Black), and 10% preferred not to share. Teachers represented special education, physical education, visual arts, theater, STEM classes, counseling, English as a Second Language, and math, science, social studies, and English language arts classes.

Professional Development

The self-paced, online makeSPACE Foundation Course for Creative Engagement provided teachers a research-based understanding of creativity in teaching and learning through reflective, experiential, and arts integrated instruction and application. The guiding design principles included making the PD experience: (a) highly engaging and interactive; (b) grounded in current theory and research; (c) scaffolded in challenge and complexity; (d) immediately actionable, adaptable, and relevant to different classroom contexts; and (e) consistently integrated with creative opportunities and exchange of creative work with peers online.

The online Foundation Course included 12 modules with 1–9 brief lessons per module, taking approximately 16 hours to complete across four months. Modules included interactive instructional packages with video,

narrated slideshows, pop-up interactives, creative exercises, reflective pro-
cesses, and brief creative assignments. Project partners sent each participant
a sketch journal and a small pack of *metaphor cards* (each card has a clip art
image of a common object or scene) to use in the course. Table 12.2 describes
the focus of the modules and lessons; teachers were required to complete
each module to proceed to the next. The course was designed to support
teachers with useful mental models, examples, and routines for exploring the
creative process. Participants experimented with key concepts and practices,

Table 12.2 Scope and Sequence for makeSPACE Foundation Course for Creative
Engagement in Arts Integration—The River Journey (Metaphor Used
Across the Course)

Welcome and Orientation	
Mile 1	Lessons: makeSPACE for creativity; Introducing the creative resources
What is creativity? How am I creative?	
Mile 2	Lessons: Creativity through the lens of ourselves and others; Stories of creative risk-taking and growth with arts integration in the classroom; Reflecting on the development of personal creative resources
Mile 3	Lessons: Teachers as artists of pedagogy
Mile 4	Lessons: How are you creative? Creative resources as teaching tools; Making your creative avatar
How do I makeSPACE for creativity?	
Mile 5	Lessons: Conditions for creative engagement; Flow stories; Meaning-making through creative engagement; Patterns; Cultivating conditions and planning for creative engagement
Mile 6	Lessons: Creative routines; Routines and intentions; Why creative routines? Vocabulary, gesture, & reflection; Many uses game and reflection; 10-minute routines; Implementation idea; Choose a routine
What is arts integration?	
Mile 7	Lessons: Role of artistic practice; Skills and sensibilities; Art is a verb! Learning through the arts; Treasure hunt; Still life
Mile 8	Lessons: What is arts integration? Tools for integration
How do I begin to integrate?	
Mile 9	Lessons: Arts integration: How? Refining intentions and review; Designing for quality arts integration; When you integrate the arts…; Core practices; Share your avatar; Which routine did you practice?
Mile 10	Lessons: Metaphorical thinking; Metaphor hunting; A metaphor for the self; Metaphor gestures and homework
Mile 11	Lessons: Reflective practices; Why reflection? Your selfie; Reflective routines; Metaphor card reflection; Opportunities to reflect; Notice…; Share your reflections
Final stretch	
Mile 12	Lessons: Braided channel; Portage; Entering the delta; Share the experience you designed; The take-out; Congratulations

such as structured uncertainty, metaphorical thinking, and metacognitive reflection. Teachers were prompted to think about the Foundation Course as if it were a river journey, illustrating how metaphors can be a gateway into creative thinking and meaning-making.

Data Sources

At the midpoint, the course challenged teachers to select a routine and implement it at least five times with their students and then share their reflections in a course discussion forum. This course reflection served as the data source for this study to describe teachers' early development in teaching for creativity, creative teaching, and creative learning. Individual teacher reflections ranged in length from as short as 20 words to as long as 230 words and totaled 19 pages of single-spaced text.

Thematic Coding and Analyses

Thematic analysis focuses on recognition, examination, arrangement, depiction, and communication of themes using a six-phase data-driven approach to coding, pattern-finding, and theme development (Braun & Clarke, 2006). Following that approach, I first coded teachers' initial reflections by dimensions of the three-part model of creativity in the classroom—teaching for creativity, creative teaching, and creative learning—based on the definitions provided earlier. I used the codes in Table 12.3 as a starting place and allowed for other codes to emerge inductively inside and outside of each category. After coding, I compiled teacher excerpts within each category and assessed patterns for commonalities, differences, and new directions. I drew on teachers' reflections to understand their perspectives and reflexivity as a teacher.

Results

Among the three overarching themes, creative learning was coded most frequently, and teaching for creativity was coded the least frequently. Each section below describes the themes and patterns identified within the three components of creativity in the classroom.

Teaching for Creativity

I begin by describing the theme of teaching for creativity first because this aspect establishes understanding and metacognition that undergirds creative teaching and creative learning. Within teaching for creativity, four themes emerged: (a) building trust and safety for creativity, (b) the importance of teacher modeling and repetition, (c) scaffolding complexity, and (d) finding comfort in collaboration.

Table 12.3 Categories and Codes for Thematic Analysis

Teaching for Creativity	Creative Teaching	Creative Learning
• Making the creative process explicit: Teacher breaks down the steps of the creative process, sharing relevant strategies about each stage. • Reflecting on creative resources used in creative routines: Teacher refers to relevant creative resources, asking students how they used them and modeling with their own examples.	• Innovating and adapting: Teacher invents new approaches and makes changes in response to students. • Risk-taking: Teacher tries new ideas and approaches that include some risk and vulnerability for challenges or failure. • Modeling: Teachers engage in learning activities and reflections alongside students, making their process, challenges, celebrations, and insights explicit. • Improvising: Teacher shifts teaching approach on the fly using resources on hand.	• Finding joy: Students demonstrate intrinsic enjoyment, individually and socially with others. • Struggling: Teacher provides scaffolding of challenge level to encourage productive struggle; students develop confidence by overcoming uncertainty and setbacks. • Creative expression: Students take advantage of learning opportunities to express their unique ideas and perspectives. • Practicing & persisting: Repeating creative routines multiple times without giving up when it becomes challenging. • Academic engagement: Student engagement in academic tasks outside of creative routines.

Building Trust and Safety for Creativity

Teachers consistently emphasized the importance of understanding the vulnerability students feel when sharing creative ideas and work with others. Teachers were surprised to see their young adolescent students' reluctance and fear during the first few experiences with creative routines. Teachers recognized the importance of light encouragement without pressure and their own participation and modeling to make students feel safe.

Some teachers perceived creative learning experiences as fun "brain breaks," apparently unaware of the rigor, skills, and trust they demanded. Many teachers commented on the creative resources students practiced (e.g., thinking outside the box, risk-taking, etc.), but only a few mentioned reflecting on these resources in class. Teachers consistently reinforced messaging about no wrong answers and welcoming mistakes. Students needed repetitions to trust these expectations in contrast to their typical lessons. For instance, one teacher shared:

After practicing my chosen routine five times, I have realized how I am able to use this in many of my lessons … I can see how it is relevant any time. I think seeing that there really were no wrong answers helped the students to see that it was okay to take risks and that when I said mistakes are ok, they now trust that. This makes them more willing to be vulnerable.

A couple of teachers attributed the continued student struggle they observed to the classroom conditions rather than to student limitations, demonstrating the teachers' vulnerability and developing awareness. One teacher shared that,

After implementing the Selfie routine five times, I am realizing that in my classroom the conditions for creative engagement are not present. It was really difficult to get students to participate meaningfully… . I think the next time we do this, I am going to provide a more creative/less literal example before students begin on their own. I think not providing a model was a mistake.

The Importance of Teacher Modeling and Repetition

Many teachers noticed how important modeling can be in teaching for creativity, in part, because creative engagement in middle school content area learning can feel unfamiliar for students. Some teachers recognized they could provide more context to help show students why what they were doing was important, as one teacher shared,

… All in all, I was surprised … some students had great ideas, and that was good to see … but I think I need to FRAME the problem next time, I can tell them the story of the inventor of Velcro, and after sharing this with them, maybe I can tell them about "creative attitudes" and how this affects their thinking.

This insight reflected a developing understanding about what teaching for creativity entails.

Teachers commonly expressed the importance of completing five repetitions of a routine to develop familiarity and proficiency for both themselves and their students. Teachers found that students engaged more easily and comfortably with each repetition—routines provided "a familiar framework." Teachers explicitly helped students push past reluctance or negative self-talk. As one teacher described, students expressed reluctance to do the visual arts integrated selfie routine, which requires students to sketch a drawing in response to a reflective prompt.

> After partaking in the Selfie Routine a few times, my students finally started getting comfortable with embracing mistakes and with the ambiguity of the task. In the beginning, a lot of them were stuck on not feeling like they were proficient enough of artists.

That teacher incorporated a key creative resource, emphasized in the PD—tolerance for ambiguity—to identify the internal process they noticed developing in their students. That point indicates a key aspect of teachers' early development—using the language and concepts introduced during the PD in their own observations and reflections. Another teacher shared that by the third day of doing the Selfie routine, his students understood the importance of metaphorically "playing around with the idea of being/thinking/imagining themselves as something other than themselves."

Scaffolding Complexity

Alongside repetitions, teachers also emphasized scaffolding, especially when metaphorical thinking was required. One teacher used literal questions first with the Metaphor Card routine images before asking for metaphors:

> Initially I asked a series of questions such as: What do you see? What does it mean to you? Is there another way to interpret it? I didn't want anyone to feel pressured to come up with a figurative language expression, so I followed the questions with the challenge: Can you create a metaphor or simile with it?

By asking students to interact with the images through close observation and literal interpretation first, the teacher prepared students to be ready for the abstract and associative thinking needed to make novel metaphors.

According to teachers, the vocabulary gesture routine was particularly challenging for students because it demanded embodiment and gestural metaphor—two creative resources uncommon in young adolescent classrooms. When students started using their bodies, teachers noted that freedom and expression resulted in laughter and joy that they do not expect in school. English for Speakers of Other Languages (ESOL) teachers used the Vocabulary Gesture routines often to explicitly teach their students how embodied learning can help them and to challenge their students creatively to invent new gestures to represent vocabulary and concepts.

Finding Comfort in Collaboration

Some creative routines exemplified the benefits of collaborative creativity for teachers—another emergent insight about teaching for creativity. Collaborative

opportunities may help students feel more comfortable sharing work and demonstrate new creative possibilities that come from combining people's ideas. One teacher made this observation in the Exquisite Corpse Poem routine, where students build a poem collaboratively.

> My students really enjoyed doing this activity and I also really loved it! We wrote several Halloween stories as a class using the exquisite corpse activity and students who normally would not share their work out loud with the class were eager to share the collaborative story… . We also did this activity with our next topic of teen challenges.

One teacher paired somewhat reserved students with more outgoing peers, which they noticed helped the shyer students to "come out of their shell."

Creative Teaching

Creative teaching drew on several creative resources for teachers consistently—tolerance for ambiguity, adaptability, and commitment. Many teachers adapted as they experimented with creative routines. They actively balanced the discomfort of watching students struggle with their commitment to repeat the chosen routine at least five times to give students the chance to persist through the struggle. This commitment resulted in teachers' insight about the importance of their own modeling and risk-taking. As one teacher shared, "It is OK that the routine failed the first time. It will only improve from here as kids learn the norms, the norms become habit, and then they can feel fully comfortable to be creative."

Adapting for Accessibility

One of the creative demands of teaching is to find different ways for students to access and engage in content and then to express and share what they know and think. These multimodal routines appeared to open teachers to this realization. For instance, one teacher shared, "I have realized that some students express themselves through drawings what they normally won't vocalize." In addition, teachers consistently thought about adapting to meet the needs of their ESOL students. One teacher shared:

> … I teach English Learners and doing [creative routines] in a small group setting facilitates a safe space where students are more comfortable with making mistakes and speaking the language more freely. Similarly, the visual cues work well as a scaffold to express feelings when words may not be readily accessible.

Another teacher shared,

> We decided to make other gestures that would be helpful especially in my ESOL class. Teachers are role-models and students watch and listen to each gesture, body language, and tone the teacher uses. They will start to mimic what they see daily without knowing. Repeating the gesture daily is a must. There were a couple of students who began using the gestures and went straight to working on their assignments. I made the mistake of mixing up one of the gestures and the students corrected me ASAP. When this happened I realized how closely they pay attention to everything I have been modeling.

The integration of a basic theater routine into everyday learning using creative and metaphoric gestures helped this teacher realize a new level of accessibility and engagement for her ESOL students.

Innovating Within Constraints

A big creative challenge to teachers was fitting opportunities for creative engagement into typical instructional flow in an ongoing way that built trust. Creative teaching may lean heavily on teacher participation alongside students to model risk-taking and vulnerability. In the early stages of teacher development, this may not be intuitive. Few teachers mentioned participating alongside students, although one teacher who did so suggested students noticed: "After practicing the Draft Dictionary [routine] five times with one of my classes, I noticed it gave the students a little bit of anxiety picking a word and saying it aloud in front of their classmates. Many of the definitions made everyone giggle and they enjoyed when I participated in the routine as well."

Other teachers shared how they modeled their own creative thinking for students, showing them different ways to approach the creative thinking challenge of Many Uses, for instance, by imagining the object in a variety of contexts. One teacher innovated a new routine from the Many Uses Game by creating a story from multiple random objects. Only a few teachers shared similar innovative adaptations of routines, demonstrating teachers' early stage of development in creative teaching.

Creative Learning

Creative learning was prominent throughout the collected data. Two aspects of creative learning, (a) finding joy in struggle and (b) student modeling and engagement, are highlighted below.

Finding Joy in Struggle

Teachers consistently reported observing students struggle, persis, find joy and creative expression, and in some cases, augment their academic engagement after creative routines. Teachers reflected on how they guided their young adolescent students through the discomfort of something new, open-ended, and challenging. With repetitions and care, that discomfort appeared to transform into joy, intrinsic motivation toward personal expression, and curiosity and openness to share with others. Most teachers observed their students' initial hesitation and uncertainty develop into creative attitudes and skills with practice. Some teachers perceived the initial hesitation as a misalignment and switched to another exercise, but most stayed the course and saw benefits from that commitment. One teacher shared,

> After practicing the chosen routine five times, I found that the students were much more willing to let their guard down and be more open to new ideas. In addition, they are more willing now to work with students they would not normally speak to … as everyone is getting to learn more about each other through … the creative routine.

The reflection above illustrates the sense of belonging that can result from routine creative engagement in the classroom.

Another teacher reflected on the importance of respecting students' autonomy and offering multiple opportunities to practice and develop familiarity:

> The more it is practiced, the more students become engaged and volunteer. They become more comfortable speaking about their ideas because they can't be wrong. Because their voice is heard more through these routines, they are more comfortable taking risks in the new math they are learning. It's nice to see them speaking more without the fear of being wrong because when mistakes are made, more learning happens. A mistake [of mine] could be calling on people who were not volunteering. I want them to want to speak and not force them when they're not comfortable yet.

This observation above illustrates how creative routines can set conditions for students' deeper engagement in other academic tasks, but care is needed to manage the vulnerability of sharing.

Student Modeling and Engagement

Whereas some teachers reflected on students' engagement and joy in creative routines as a "brain break," others saw learner insight and development in

the process and positive student-to-student role modeling. For instance, one teacher shared,

> My favorite moment so far is when a group of students fell to the ground like leaves for the word foliage—they were all cracking up and rolling around on the floor like leaves falling from a tree and blowing in the wind. I think this was a powerful moment and solidifies how this routine can engage students in creative thinking WHILE HAVING FUN!!! It encouraged other groups to step their game up and was a moment that allowed for students to encourage others to participate.

Additionally, some teachers began to understand that basic creative and artistic learning routines can support students' academic development. One teacher's reflection exemplified this experience:

> After implementing the vocabulary gestures routine several times I was happy with how it helped students engage with complicated vocabulary words. Students were having difficulty with math vocabulary dealing with translations but through adding in movement, students were able to make deeper connections to the words. I felt like this strategy was especially impactful for my ESL students. By adding movement to the words, it helped them to remember both the word and the movement they were mimicking on the grid in the math problems.

That teacher demonstrated their developing skill in pairing gestural representations of vocabulary—a basic process drama technique—with complex math terms that represent movement on the coordinate grid. Similarly, another teacher shared that routinizing creative learning experiences allowed a gradual scaffolding toward more academically integrated challenge.

Discussion

My analysis of teacher reflections suggests that their development of creative resources through creative routines represents important early stages of development for arts integration and creative engagement. Teaching for creativity requires teachers' explicit instruction, messaging, and modeling of creative resources in action, which may be the most challenging dimension for teachers early in this development and requires deeper understanding about creativity than one course can accomplish. Creative teaching draws on teachers' own creative resources as adaptable instructional designers and reflective classroom practitioners, setting and reinforcing conditions for students' creative learning. Some teachers integrated routines creatively into their content, and many modeled and messaged risk-taking in creative learning.

Creative learning frames out the observable engagement, responsiveness, and development of students. Teachers shared observations of students' engagement in creative routines on cognitive, emotional, and behavioral levels, reflecting the tenets of SDT (Ryan & Deci, 2000). Moreover, students' creative engagement (Anderson, 2018) was on display as they expressed new meaning and generated new possibilities together. Findings showed how the three dimensions of teaching for creativity, creative teaching, and creative learning are interrelated and distinct parts of teacher development toward more complex arts integration. The explicit instruction and creative experiences in the Foundation Course that prepared teachers for implementation appeared to support development in teachers' knowledge, skill, and practice.

Creative Reluctance in Middle Grades

Consistently, participating teachers or counselors who worked with different age groups found middle level students to be more reluctant than younger elementary school students. Young adolescent reluctance in creative engagement is likely tied to the role that social acceptance plays during this developmental stage (Dahl et al., 2018) and the outsized role social conformity plays, especially for male-identifying students (Marasco, 2018). In a large sample of U.S. early adolescent students, Anderson (2024) found that male students were more likely to demonstrate downward trajectories in creative thinking production than female students, and those male students valued conformity at a higher level, which predicted lower creative thinking trajectories. Based on teacher reflections in this study, teacher modeling of non-conformity and risk-taking in creative and divergent ideas should be prioritized in the early stages of creative routines and creative engagement for early adolescent students. Teachers' modeling and messaging are essential to reinforcing psychological safety (Wanless, 2016) for student engagement, enabling a sense of relatedness, competency, and autonomy (Ryan & Deci, 2000) and creative potential (Anderson, 2018) for individual students and the classroom community as a whole.

Students' reluctance to express their creative selves may also be related to teachers' own fears and anxieties about creative expression (Anderson et al., 2022). The uncertainty about how students will respond and the open-endedness of creative teaching tested teachers' tolerance for ambiguity and need for closure (Kruglanski et al., 1993) and likely triggered creativity anxiety for some teachers in this study (Anderson et al., 2022; Daker et al., 2019). Teachers and school districts implementing similar professional development approaches should help teachers navigate their own creative insecurities, so teachers are prepared to help young adolescents work through creative reluctance that arises in the classroom.

Benefits of Creative Routines to Teacher Development

Several benefits and limitations about multimodal creative routines emerged from these findings. First, brief, low-stakes creative routines can support teachers' and students' comfort with different artistic and creative modalities before scaffolding toward more long-term committed projects. Second, teachers can test out different approaches prior to committing time and resources to more intensive arts integration, such as learning fractions with theatrical gesture versus learning fractions with musical rhythm. Third, if teachers repeat these routines, then students may develop both the associated creative resources they can carry into academic and arts integrated learning and the trust and comfort necessary for authentic creative engagement in the arts.

Brain Break or Brain Awakening?

Some teachers perceived students' enjoyment during routines as a "brain break," reflecting a bias against playfulness and creative thinking in the "normal" routine of learning. It may be important for teachers to explicitly consider the creative resources and rigor at work to recognize the process as a "brain awakening" rather than a "brain break." The nature of teachers' reflections suggests that most value student joy and laughter as an important and sought-after outcome of their teaching, but not all saw the value in this student joy translating to the primary focus of the lesson. Additional research is needed to investigate teachers' understanding of how arts integration activities can be integral parts of the learning experience rather than fun activities to break up the learning routine.

The inclusion of arts integrated routines into the learning experience raises the issue of teachers' timing of their creative routines. Some teachers facilitated the routine as an "ice breaker" at the beginning of class, some closed out class with the routine, and others integrated a routine, such as Vocabulary Gestures or Many Uses Game, into the main part of the lesson. The inherent flexibility of routines means they fit at any point during a class period to awaken students' creative thinking, expression, and metacognition. However, teacher intention is important. Though they foster joy, these routines are intentional learning experiences, not lesson "decoration." Teachers should carry purpose and intention in their implementation and make time for students to reflect on the learning that occurred.

Conclusion

Creative routines can be a meaningful developmental stepping stone for teachers toward arts integration for young adolescent students' creative engagement and development. Future research is needed to understand how

best to scaffold the next stage of development from creative routines toward more intensive arts integration. Structured reflection with accessible mental models and frameworks can be key to helping teachers conceptualize, materialize, and refine creative engagement in the classroom.

Notes

1 Visit www.makespaceproject.org for more information, research, and classroom resources.
2 All teachers consented to participate in this research following IRB-approved protocol for human subjects research.

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