

Six Shifts in Math

What It Means in Dance

Shift 1 PK-5	Focus	Teachers use the power of the eraser and significantly narrow and deepen the scope of how time and energy is spent in the math classroom. They do so in order to focus deeply on only the concepts that are prioritized in the standards so that students reach strong foundational knowledge and deep conceptual understanding and are able to transfer mathematical skills and understanding across concepts and grades.	<ul style="list-style-type: none"> • Focus on the intention of the movement in regard to its execution and meaning to the whole • Conduct in-depth study of dance from a given culture • Focus on the structure of music in regard to pulse, timing, meter, patterns, and dynamics • Translate elements of structural phrasing to mathematical skills such as pattern recognition, multiplication, division, sequencing, and geometrical shapes • Focus deeply on the creation of movement and movement sequences as they relate to a particular concept such as time, space, and energy • Focus on differences between the body in motion and the body in moments of stillness • Focus on the natural rhythms of the body such as heart rate and breath obtaining an internal focus and awareness • Understand body mechanics paying specific attention to range of motion • Conceptualize movement of each joint type • Isolate muscles and bones that enable specific movement
Shift 2 6-12	Coherence	Principals and teachers carefully connect the learning within and across grades so that, for example, fractions or multiplication spiral across grade levels and students can build new understanding onto foundations built in previous years. Teachers can begin to count on deep conceptual understanding of core content and build on it. Each standard is not a new event, but an extension of previous learning.	<ul style="list-style-type: none"> • Build on prior knowledge and skills in the Dance classroom • Create a dance portfolio that identifies their growth in the classroom as well as identify the standards and indicators highlighted within their portfolio
Shift 3	Fluency	Fluency Students are expected to have speed and accuracy with simple calculations; teachers structure class time and/or homework time for students to memorize, through repetition, core functions (found in the attached list of fluencies) such as multiplication tables so that they are more able to understand and manipulate more complex concepts.	<ul style="list-style-type: none"> • Gain fluency in movement through consistent and qualitative repetition of dance core vocabulary and dance protocols • Gain fluency with physical movement vocabulary as well as vocabulary of the stage, rehearsal space, technical environments
Shift 4	Deep Understanding	Teachers teach more than “how to get the answer” and instead support students’ ability to access concepts from a number of perspectives so that students are able to see math as more than a set of mnemonics or	<ul style="list-style-type: none"> • Perceive aspects of dance elements beyond the classroom • Describe the characteristics of significant periods of

		<p>discrete procedures. Students demonstrate deep conceptual understanding of core math concepts by applying them to new situations. As well as writing and speaking about their understanding.</p>	<p>dance history in relation to social trends</p> <ul style="list-style-type: none"> • Experience and observe the significance of dance in other cultures • Identify the universal elements and themes of dance regardless of gender, ethnicity, religion, nationality, or age • Describe the synthesis of visual arts, music, and theater in a dance performance • Respond to dance performances outside the classroom with the use of level-appropriate vocabulary • Understand the numerous vocations/avocations in dance (performer, choreographer, director, physical therapist, critic, teacher, dance therapist, and administrator) • Create the production aspects of informal and formal movement studies including: brainstorming, planning, rehearsal, and staging choices • Create and coordinate costumes, props, scenery, make-up, sound and lighting to present a unified production concept for different styles of dance
Shift 5	Applications	<p>Students are expected to use math and choose the appropriate concept for application even when they are not prompted to do so. Teachers provide opportunities at all grade levels for students to apply math concepts in “real world” situations. Teachers in content areas outside of math, particularly science, ensure that students are using math – at all grade levels – to make meaning of and access content.</p>	<ul style="list-style-type: none"> • Apply concepts of dance education to other real world situations; such as applying self-discipline; determination; openness to new ideas; goal setting; appreciation for skills and craftsmanship of other disciplines; time management; and creative spirit. • Encounter dance outside the academic setting and respond based on their dance knowledge and skills • Create and justify a written personal review of a production that incorporates both performance and technical evaluation using appropriate terminology; include elements of social significance, and/or the function of that dance in society. • Investigate the works of a given culture • Investigate the work of an historic choreographer • Create dances reflecting significant aspects of another culture • Identify college and community opportunities in dance after graduation and the requirements for application or participation

			<ul style="list-style-type: none"> • Choreograph a performance piece applying knowledge of dance craft and theatricality
Shift 6	Dual Intensity	<p>Students are practicing and understanding. There is more than a balance between these two things in the classroom – both are occurring with intensity. Teachers create opportunities for students to participate in “drills” and make use of those skills through extended application of math concepts. The amount of time and energy spent practicing and understanding learning environments is driven by the specific mathematical concept and therefore, varies throughout the given school year.</p>	<ul style="list-style-type: none"> • Create the production aspects of informal and formal movement studies including: brainstorming, planning, rehearsal, and staging choices • Create and coordinate costumes, props, scenery, make-up, sound and lighting to present a unified production concept for different styles of dance