Creative Engagement in Middle School

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ArtCore is a multi-year model development and research initiative joining teaching artists and middle school teachers to innovate academically integrated arts learning and adapt comprehensive schoolwide strategies unique to each school context.

PURPOSE

To some, the massive shift underway to a knowledge-based economy suggests the arrival of the creativity age—a time when a fast-growing creative class drives the economic engine through new ideas, new technology, creative content, and innovation (Florida, 2002, 2011; Pink, 2006). Accordingly, the development of creativity in the next generation of our workforce should be of paramount concern (Zhao, 2012). Yet, there is some evidence that creativity, especially in our youngest students is declining (Bronson & Merryman, 2010; Kim, 2011). Simultaneously, opportunities to learn through and in the arts has decreased, especially for students in high poverty schools (GAO, 2009). Some research indicates that certain classroom environments and types of feedback (Beghetto, 2013; Beghetto & Kaufman, 2010; Schacter, Thum, Zifkin, 2006) and accountability mechanisms (Zhao, 2012; Zhao, 2014) undermine efforts to boost both creative growth and academic achievement of students.

Equitable opportunity to experience, develop, and grow creative skills is at issue in education today. Recent evidence from the 2008 NAEP Arts Assessment suggests an opportunity gap in access to and knowledge in the arts (Institute for Education Sciences, 2009). Some districts have hypothesized that reform efforts in low-performing schools serving poor, minority students should center on the engagement of learners through creativity in the arts across the curriculum (Barry, 2010; Corbett et al., 2002; Ingram, 2003; Peppler, Powell, Thompson, & Catterall, 2014; Southworth, Gardiner, & Westervelt, 2013; Stoelinga, Silk, Reddy, & Rahman, 2015). Research and evaluation (Robinson, 2013) indicates both promise in this arts integration approach and a need for more rigorous research designs to disentangle the mechanisms at play and conditions that hold when positive effects are found.

In this study we posit that immersive training and schoolwide adaptation of arts integrated teaching and learning designed to target factors of creative engagement and habits of mind can heighten motivation, competency, belonging, metacognition, creativity, and positive school community.
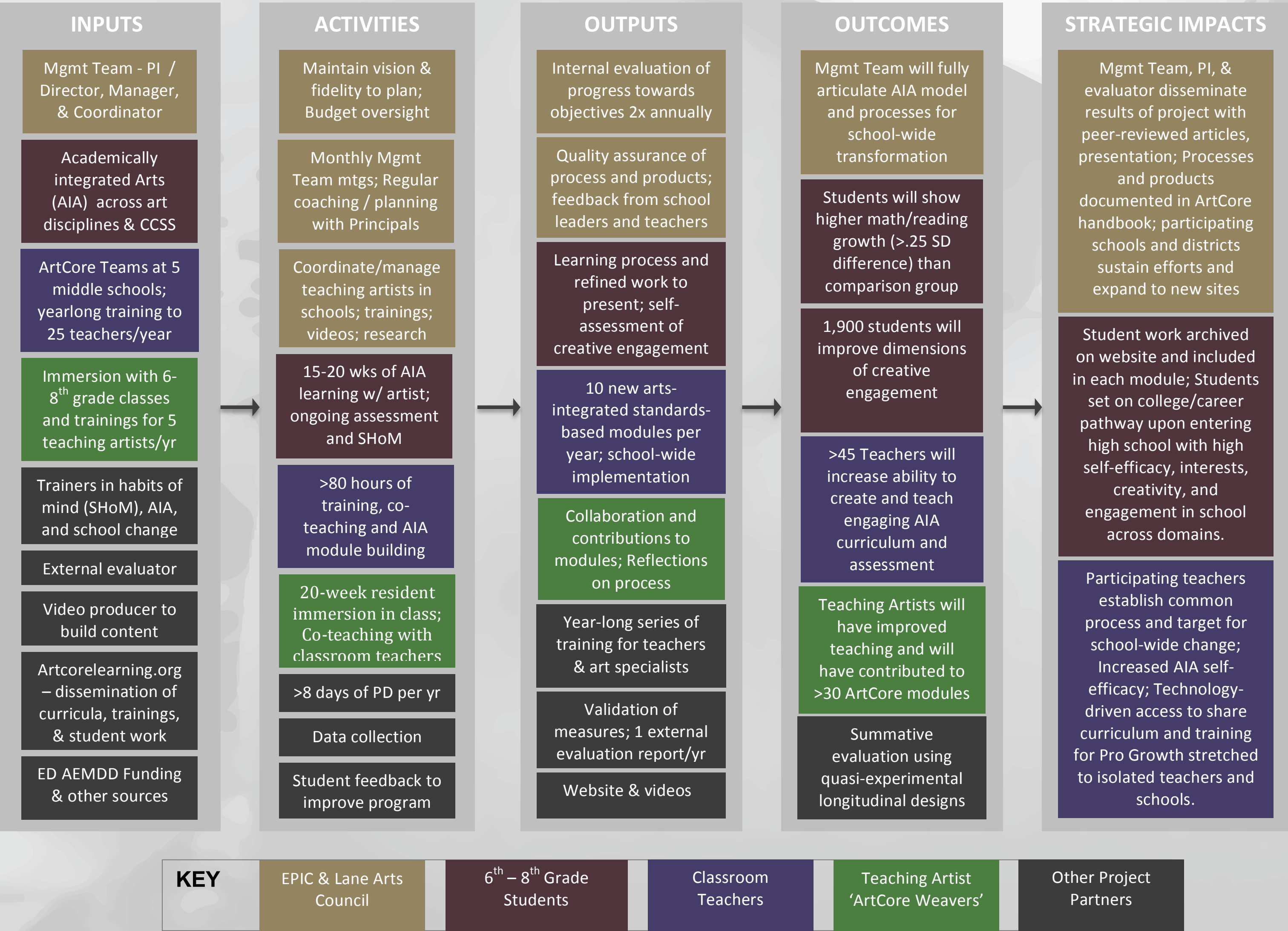
THEORY OF CHANGE

Staged implementation for gradual schoolwide transformation
In-depth collaboration for professional growth, risk-taking, and innovation
Studio Habits of Mind as common framework and transferrable across content
Intentional integration of creative disciplines and academic standards and themes
Student engagement factors governed by instructional practices and classroom climate
Art and creativity as a process of interpreting, envisioning, crafting, reflecting, and contributing
Academically integrated arts increases creative engagement and in turn improves achievement
Teacher and student belief and affect change, deepen self-efficacy, and reinforce changes schoolwide

RESEARCH QUESTIONS

1. Does the ArtCore learning experience contribute to academic growth for students, creativity, and engagement in learning and school?
2. Does the ArtCore experience contribute to growth in creative teaching and teacher capacity to design and facilitate academically integrated arts?
3. Does the ArtCore model support positive schoowide climate, teacher growth, and equitable opportunities and achievement in student learning?
4. Is the model sustainable, customizable, and replicable?

METHOD

Multiphase exploratory mixed methods design using qualitative analysis to inform hypotheses tested in quantitative models within a longitudinal, quasi-experimental program of inquiry that includes a range of predictors and outcomes of interest.

RESEARCH DESIGN

Constructs of Interest	Quantitative Measures	Qualitative Measures
STUDENTS		
Reading & Math	easyCBM & SmarterBalanced	Student Work Samples
Creativity: • Creative Self-Efficacy • Flexibility, Fluency, Originality, Elaboration, & Attitudes about Art	Runco's Creativity Assessment Battery & MetaSkills Survey	Student Work Samples, Student Interviews & Observations
Classroom Creative Engagement	Classroom-level Observation Scores	Student Focus Groups
Student Engagement & Metacognition • Belongingness • Relationships & Support • Flow & Perseverance • Relevance & Aspirations • Mindset & Affect	Student Engagement Instrument; Motivation & Engagement Survey, Growth Mindset Scale, Office Discipline Referrals, and Attendance	Focus Groups, Interviews, Video Documentation, Student Work Samples
TEACHERS		
Teacher & Artist Creative Collaboration • Multi-disciplinary thinking • Teacher ownership	Number of arts integrated units developed, Number of units replicated independently	Observations, Teacher Interviews, Curriculum Modules
Classroom Instruction • Student Choice • Efficacy & perception • Flexible formative assessment • Teaching practices for creative engagement • Design of new multidisciplinary Arts Integration	Teacher Survey Protocol, Arts integration value and use, MICE observation scores	Observation, Focus Groups, Interviews, Video Documentation & Lesson Plans
SCHOOL		
School Climate & Culture • Discipline • Perception of Culture & Support • Attendance	Office Discipline Referrals, School Attendance & Truancy, Engagement Surveys	Observation, Interview, Focus Groups, & Video Documentation
Implementation Intensity & Fidelity • Infusion of the arts • Strategic plan • Profile of a learner • Student exhibition of learning	Number of arts integrated courses, hours of instructional time dedicated to teaching the arts, evidence of exhibition of work	Interview with Teachers and Principal; Analysis of school improvement plan

LOGIC MODEL

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	STRATEGIC IMPACTS
Mgmt Team - PI / Director, Manager, & Coordinator	Maintain vision & fidelity to plan; Budget oversight	Internal evaluation of progress towards objectives 2x annually	Mgmt Team will fully articulate AIA model and processes for school-wide transformation	Mgmt Team, PI, & evaluator disseminate results of project with peer-reviewed articles, presentation; Processes and products documented in ArtCore handbook; participating schools and districts sustain efforts and expand to new sites
Academically integrated Arts (AIA) across art disciplines & CCSS	Monthly Mgmt Team mtgs; Regular coaching / planning with Principals	Quality assurance of process and products; feedback from school leaders and teachers	Students will show higher math/reading growth (>.25 SD difference) than comparison group	
ArtCore Teams at 5 middle schools; yearlong training to 25 teachers/year	Coordinate/manage teaching artists in schools; trainings; videos; research	Learning process and refined work to present; self-assessment of creative engagement	1,900 students will improve dimensions of creative engagement	
Immersion with 6-8ᵗʰ grade classes and trainings for 5 teaching artists/yr	15-20 wks of AIA learning w/ artist; ongoing assessment and SHoM	10 new arts-integrated standards-based modules per year; school-wide implementation	45 Teachers will increase ability to create and teach engaging AIA curriculum and assessment	Student work archived on website and included in each module; Students set on college/career pathway upon entering high school with high self-efficacy, interests, creativity, and engagement in school across domains.
Trainers in habits of mind (SHoM), AIA, and school change	80+ hours of training, co-teaching and AIA module building	Collaboration and contributions to modules; Reflections on process	Teaching Artists will have improved teaching and will have contributed to >30 ArtCore modules	
External evaluator	20-week resident immersion in class; Co-teaching with classroom teachers	Year-long series of training for teachers & art specialists	Participating teachers establish common process and target for school-wide change; increased AIA self-efficacy; Technology-driven access to share curriculum and training for Pro Growth stretched to isolated teachers and schools.
Video producer to build content	8+ days of PD per yr	Validation of measures; 1 external evaluation report/yr	Summative evaluation using quasi-experimental longitudinal designs	
Artcorelearning.org – dissemination of curricula, trainings, & student work	Data collection	Data collection		
ED AEMDD Funding & other sources	Student feedback to improve program	Website & videos		

KEY: EPIC & Lane Arts Council | 6ᵗʰ – 8ᵗʰ Grade Students | Classroom Teachers | Teaching Artist 'ArtCore Weavers' | Other Project Partners

LESSONS LEARNED

STUDENTS

"There are no boundaries, no limts, trust yourself."
"Its a huge privilege to be able to choose to be myself."
"Having a class that just teaches how to be…"
"I have learned the most from watching other people."
"Pushes you to do stuff you normally wouldn't want to."
"When you think you're done, keep going."
"I usually don't like going to school…and to be able to do art in the day…it helps me go to school."
"Mistakes can be a portal to a new discovery."

TEACHERS

"I'm lecturing less."
"My kids who built a lego model of a city state…aren't into posters…met criteria for success in a different way."
"I think [ArtCore] allows them to shine…with extra talents."
"Students are definitely more engaged."
"I did not see anybody who wasn't interested in ArtCore."
"[Showing students] that even adults can learn new things."
"[Equity]…it doesn't just reach kids who are caught up."
"Think of all sorts of out of the box ways…to find a hook."

1. Designing for sustainability means meeting schools where they are and customizing.
2. Professional development should activate creativity and disequilibrium.
3. Analyze qualitative data to build hypotheses or models to test quantitatively.
4. With the goal of schoolwide ownership, define implementation 'fidelity' anew.
5. Validating measurement of complex constructs must be done with care - use a pilot.
6. Academically integrated arts appears to engage learners at both ends of spectrum—reluctant learners in the arts and reluctant learners in academics. Design of AIA modules should consider elements of creative engagement (e.g., Math Anxiety Monster Project).
7. The myth that middle school boys won't be into the arts is pervasive and wrong.
8. Some principals have very little training on strategic planning and will need coaching.

	2015		2016			2017			2018			2019		
	Year 1		Year 2			Year 3			Year 4			Year 5		
	W Sp S	F	W Sp	S	F	W Sp	S	F	W Sp	S	F	W Sp	S	F
Intervention Activities														
Student Cohort A Treatment 5 Schools	T 6ᵗʰ gr. Assess	T	7ᵗʰ gr. Assess		T	8ᵗʰ gr. Assess			9ᵗʰ gr. Assess					
Control 5 Schools		(Business as usual)												
	Assess		Assess			Assess								
Student Cohort B Treatment 5 Schools			ArtCore Tier 2 C 6ᵗʰ gr. Assess			ArtCore Tier 2 7ᵗʰ gr. Assess			ArtCore Tier 2 8ᵗʰ gr. Assess					
Control 5 Schools			(Business as usual)											
			Assess			Assess			Assess					
Student Cohort C Treatment 5 Schools						ArtCore Tier 3 C 6ᵗʰ gr. Assess			ArtCore Tier 3 7ᵗʰ gr. Assess					
Control 5 Schools						(BAU)								
						Assess								
Student Cohort D Treatment 5 Schools												ArtCore 6ᵗʰ gr. Assess		
Longitudinal Sample														
Students	590		1,091			1,517			1,879					
Teachers	20		40			60			80					

Longitudinal sample assumes 15% attrition of sample each year
T: Training and co-teaching is most intensive for teachers in their first-year of
C: Coaching and Professional Learning Community continue after first year
BAU: Business as usual for Control schools

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