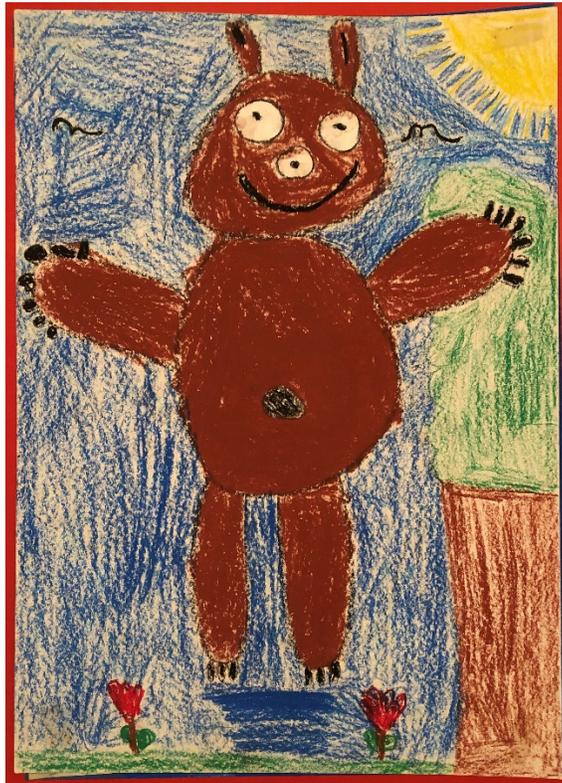


# Partnering Arts, Communities & Education (PACE):

2018-2019

## Project Report



Submitted by

F. Robert Sabol, Ph. D.

Purdue University,

West Lafayette, Indiana

June 2020



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## ACKNOWLEDGEMENTS

Indiana has a long and rich history in the arts. The arts have recorded and celebrated all of the people and cultures in the state and nation. The public has viewed education in the arts as an important aspect of a complete education. Increasingly, contributions the arts make in preparing graduates from our schools to be college and career ready are being recognized. The unique habits of mind, emphasis on creativity, collaboration, and communications, upon which the arts are founded, have opened new opportunities and developed capacities of those with an education in the arts that have enabled them to be highly productive contributing citizens and members of our local communities.

The Executive Director of the Indiana Arts Commission, Lewis Ricci, and I have held numerous discussions about arts education and the need for ongoing research about whether and how arts education impacts learning and student achievement. He clearly understands and embraces the idea of using research to ground programming, development, and decision-making related to arts education. His vision for arts education and the contributions it makes to learning in our schools is inspired and worthy of all arts educators and students in arts classrooms across Indiana and the country. His vision and dedication to providing the citizens of Indiana with the finest arts programming and education in the arts has garnered attention and praise from across the country. His vision for the PACE program and support for implementing it were critical in making this vision for arts education a reality in Indiana.

Other individuals at the Indiana Arts Commission (IAC) contributed ideas, support, and facilitated communications between the IAC and me. Stephanie Haines, Community Development Manager and Arts Education and Accessibility Manager and Paige Sharp, Director of Programs enhanced communications and discussion that led to input and support necessary for shaping and completing this study. Their help and ongoing encouragement were of major significance and are greatly appreciated. Their dedication to providing quality arts education for all people in Indiana is highly commendable.

Special recognition goes to the administrators, teachers, teaching artists, parents, and students in Indianapolis Public School 51 and the Arts Council of Indianapolis, John W. Kendall Elementary School and the Marion Community School of the Arts, South Wayne Elementary and the Fort Wayne Dance Collective, Inc., and Van Buren Elementary School with Brown County Art Guild, Inc. for their dedication, professionalism, and commitment to providing the highest quality of education for all students in their schools and communities and their understanding that an education which includes the arts is of lifelong value to all people in every community.

Members of the Board of Commissioners of the Indiana Arts Commission clearly understand the role an education in the arts plays in supporting communities across the state and country. They have supported arts education programming and artists through the mission and all programs sponsored by the IAC. Members of the board have not only contributed their time and expertise to the work of the IAC, but they also have made an ongoing commitment to

the people of Indiana and to enhancing and expanding the fine artistic heritage countless people and communities in Indiana have helped to create and perpetuate.

The citizens of Indiana have a long-standing relationship with the arts. The history of Indiana is populated with numbers of talented artists and arts educators. Their artistic creations and work in our schools and communities have enriched the lives, education, economy, and quality of life for everyone within the state. They understand the value of the arts in their daily lives. They support the need for comprehensive balanced arts education in our schools and communities across the state. The PACE program and everyone associated with it have demonstrated their commitments to providing high quality arts education for our youth and to enhancing the roles the arts play in our daily lives and in the future of our state and nation.

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Purdue University

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## Partnering Arts, Communities & Education (PACE): 2018-2019 Project Report

F. Robert Sabol, Ph. D.

Purdue University

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### INTRODUCTION

**T**he arts have always been a central focus of human existence. Every culture and society throughout the history of the human race have created works of art. The arts have provided a means of communication and the means of recording the development of human beings, their ideas, values, beliefs, and their hopes, dreams, and aspirations. The products of artists are part of the enduring record of the thinking and values human beings embrace and celebrate.

All communities develop identities and a heritage that makes them unique.

Communities consist of physical, cultural, political, economic, and social environments.

Supporting these environments are numbers of systems that provide services and opportunities for members of the communities that enable them to thrive and prosper. As with all living things, communities grow and change over time to meet changing needs and to support their growth and development. As communities evolve, they act to preserve that which they value most highly and to embrace change that will insure their vitality and places in the future.

Education has long been at the core of all democratic societies. It is the means through which humanity transmits its achievements and enables members of a society to make meaningful contributions to the society. Education is one of the single most important contributions any society can provide for its members. The welfare, development, and preservation of all societies is based, in large part, on the quality of education its members receive. The greatest societies in the history of the world have contributed to the development of their societies through education.

Arts education is going through a period of unprecedented change (Sabol, 2013). Schools are faced with demands from the public, government, and business that have created a climate of urgency about education and preparing students to be productive members of society. In order to meet such demands, schools have placed ever-increasing emphasis on a narrow curriculum with increasingly limited opportunities to learn. Increasingly, educational programming in the arts has been reduced or eliminated in some schools. The inherent and pressing need for quality education in the arts has never been greater. Some suggest that the

future of the United States is linked to how well it can reap the benefits that arts education provides (Eisner, 1998; Florida, 2002, 2005; Friedman, 2006; Pink, 2006; Sabol, 2010, 2013).

Establishment of the Partnering Arts, Communities, and Education (PACE) program represents a means through which uniting the arts, communities, and education can occur in order to enrich the lives of children and all citizens as they grow and assume their positions as informed adults in all walks of life in Indiana. The PACE program holds significant potential for making a positive impact on the educational foundations of citizens of Indiana and for making long-term contributions to the health, growth, and vitality of the state of Indiana.

The PACE program is an articulated approach to arts learning that includes established goals for arts education in Indiana (See Appendix A.). The PACE program is clearly detailed by the Indiana Arts Commission in its program description:

The Indiana Arts Commission created the Partnering Arts, Communities & Education (PACE) program in 2014. PACE is an arts education program developed to establish long-term, in-depth, and sustainable partnerships between elementary schools with high poverty/low performing populations and arts organizations to impact student growth and achievement through extended arts and literacy experiences. In the PACE program, arts organizations utilize highly qualified teaching artists to work with first through fifth grade students in an identified partnership school. They collaboratively develop a specialized curriculum focused on one arts discipline: dance, music, theatre or visual arts (Indiana Arts Commission, 2014).

The publication goes on to describe how the program is to be implemented into schools and communities:

PACE arts experiences occur as part of the academic day, at frequent and regular intervals throughout the entire school year, and align with the school's planned academic curriculum. Students participating in the PACE program not only achieve proficiency in an arts discipline, but also experience an increase in their overall academic achievement, an improvement in socialization skills and a heightened level of school and community engagement. In PACE, classroom teachers learn along with their students and integrate the arts concepts into other curriculum areas to augment student learning and align with the school's academic curriculum. Teacher and artist professional development is also a key element of the program.

Assessment tools measuring student growth and understanding in the art form have been carefully developed with the support of a nationally recognized expert in the development of the national core arts standards, the corresponding assessments, and data collection and analysis. The evaluation process is standardized for all participating partnerships.

The Indiana Arts Commission recognizes the importance of sustaining the ongoing development of existing partnerships while supporting the establishment of additional programs in support of the arts and arts education throughout the state. Eventual expansion of

PACE partnerships to include higher grade levels is anticipated as initial partnerships demonstrate evidence of success.

The PACE program is intended to assist elementary schools, artists, and arts organizations in establishing long-term, in-depth, and sustainable partnerships for the purpose of impacting student growth and achievement through extended and connected arts and literacy experiences. Expectations of the program include the following:

- (1.) Art experiences should be planned to occur at frequent and regular intervals throughout the entire school year, align with the academic curriculum, and include related classroom literacy activities both preceding and following each arts experience.
- (2.) The program should include necessary and appropriate initial and ongoing teacher and artist professional development.
- (3.) Family and community awareness and engagement is an important component of the program, as is increased student community understanding and involvement.
- (4.) Annual end-of-year reports will indicate program progress and fulfillment. Student success will be measured by an evaluation process formulated for use in all participating partnerships and as a means of data collection and analysis (Indiana Arts Commission, 2014).

In order for schools to be eligible for participating in the PACE program, they must meet a number of eligibility qualifications. They include the following:

Current eligible schools will be:

- (1.) Indiana elementary public, private, parochial, or charter schools;
- (2.) Schools performing below the state average passing rate on the most recent state standardized assessments in English/Language Arts and Math and having a Free/Reduced Meal rate above the state average; and
- (3.) Representative of urban, rural, and underserved populations.

Programs should not be continuations or expansions of existing partnerships but may include schools that have had limited arts experiences outside of the regular arts classroom. (Indiana Arts Commission, 2014)

Schools interested in participating in the PACE program submitted proposals that were reviewed by the IAC. Four elementary schools were selected to receive funding for the 2018-2019 school year. Selected schools and participating community arts organizations included Indianapolis Public Schools, School 51 and the Arts Council of Indianapolis, John W. Kendall Elementary School and the Marion Community School of the Arts, South Wayne Elementary and the Fort Wayne Dance Collective, Inc., and Van Buren Elementary School with Brown County Art Guild, Inc. Arts educators, classroom teachers, teaching artists, and administration in the schools worked closely to create curriculum and to implement assessments for their programs.

The following includes a report of findings from assessments these schools conducted to gauge the affect and impact of the PACE program on students' learning in their schools. Findings from the data analysis will be reported in aggregated statistics that include the combined performances from all participating schools in the PACE program since its inception

in 2015 through 2019. Additional findings from the four participating schools in the 2018-2019 PACE program will be included as well.

---

## METHODOLOGY

This study utilized quantitative research methodology. Assessment instruments were created to gather information about students' engagement in the PACE program regarding their attitudes about the arts, discipline specific arts knowledge and vocabulary, arts discipline skills, and writing skills, about the PACE program. Data were collected from all participating schools. Descriptive statistics were used to summarize findings produced from analysis of the empirical data collected from the instruments. Summaries of findings will be reported below.

---

### Participants

Participants in the 2018-2019 PACE program included Indianapolis Public School 51 in partnership with the Arts Council of Indianapolis, John W. Kendall Elementary School in partnership with the Marion Community School of the Arts, South Wayne Elementary in partnership with the Fort Wayne Dance Collective, Inc., and Van Buren Elementary School in partnership with the Brown County Art Guild, Inc.

Schools selected to participate in the PACE project are expected to make a three year commitment to the program. McKinley Primary Center in partnership with the Robinson Community Learning Center at the University of Notre Dame in South Bend, Indiana, Meadows Elementary School in partnership with Indiana State University's Community School of the Arts in Terre Haute, Indiana, Pine Elementary School in partnership with Young Audiences Indiana, Inc. in Michigan City, Indiana were funded for the full three-year period each school is expected to make for this study. These schools completed their three year participation in the project during the 2017-2018 academic year. South Wayne Elementary School in partnership with the Fort Wayne Dance Collective, Inc., and Van Buren Elementary School in partnership with the Brown County Art Guild, Inc. were added to the PACE cohort of participating schools for the 2016-2017 study. Both of these schools have completed two years of participation in the PACE program and with this report they will have completed their three commitment to participating in PACE.

A total of 252 students participated in the PACE program in 2018-2019, compared with 468 students who participated in the PACE program in 2017-2018, 584 students in the 2016-2017 program, and 333 students in the 2015-2016 PACE program. This represents a decrease of 216 students or 46% fewer students from 2017-2018 to 2018-2019. The decrease occurred due to three schools listed above having completed their commitment to the PACE project during the previous academic year. Assessment results from all of these students were included in analyses of assessments for the PACE program in the aggregated summary of PACE performances for the period from 2015 through 2019.

The PACE program at Indianapolis Public School 51, *Literacy Education through Arts Partnership (LEAP)*, included a total of 50 students in 2018-2019. All of these students were in third grade classes and received theatre instruction. Instruction was provided by a resident theatre teaching artist during 20 weekly class periods of 35 minutes each.

The PACE program at Kendall Elementary School, *The Sycamore Project*, included a total of 39 students who were in second grade classes. They received music instruction from a resident music teaching artist during 20 weekly class sessions of 45 minutes each.

South Wayne Elementary school was added to the PACE program during the 2016-2017 academic year. The PACE program at South Wayne Elementary School, *D is for Dancing*, included a total of 101 students for the 2018-2019 academic year compared with 116 students in 2017-2018. This number is down by 15 students from 2017-2018. Fewer participating students from 2017-2018 to 2018-2019 represents a 13% reduction in participants at this school. Students in two second grade classes and two third grade classes received instruction in dance. Instruction was provided by a resident dance artist during 30 weekly class sessions of 45 minutes each.

Van Buren Elementary School was added to the PACE program during the 2016-2017 academic year. The PACE program at Van Buren Elementary School, *Art Colony*, included a total of 70 students in the 2018-2019 school year. This number is up by two students from the 2017-2018 school year. This increase represents a 3% increase from 2017-2018 to 2018-2019. Students from two second grade classes and two third grade classes received instruction in

visual arts. Instruction was provided by a resident teaching artist during 20 weekly classes of 60 minutes each.

During the 2015-2016 PACE program, a total of 333 students from four elementary schools participated in the program. With the addition of South Wayne and Van Buren elementary schools in the 2016-2017 PACE program, the total number of participating schools increased to six and the number of students increased to 584 students or an increase of 43%. In the 2017-2018 PACE program, a total of 468 students from five elementary schools participated in the program or a decrease of 18%. An explanation for this decrease was given above. In the 2018-2019 PACE program a total of 260 students from four elementary schools participated in the program or a decrease of 45%. An explanation for this decrease is provided above.

Table 1

PACE 2015-2019 Arts Disciplines, Participating Schools, and Numbers of Students: N = 1,645

Arts Discipline	School	2015-2016		2016-2017		2017-2018		2018-2019		Total	
		Students	%								
		N = 333		N = 584		N = 468		N = 260		N = 1,645	
Dance	Pine	70	21%	131	22%	112	24%	0	0%	313	
	South Wayne	0	0%	59	10%	116	25%	101	39%	276	
	Total	70	21%	190	33%	228	49%	101	39%	589	36%
Music	Kendall	0	0%	0	0%	0	0%	39	15%	39	
	Total	0	0%	0	0%	0	0%	39	15%	39	2%

---

Theatre	Madison	116	35%	185	32%	0	0%	0	0%	301
	McKinley	85	26%	70	12%	26	6%	0	0%	181
	IPS, School 51	0	0%	0	0%	0	0%	50	19%	50
	Total	201	60%	255	44%	26	6%	50	19%	532 32%
<hr/>										
Visual Arts	Meadows	62	19%	97	17%	146	31%	0	0%	305
	Van Buren	0	0%	42	7%	68	15%	70	27%	180
	Total	62	19%	139	24%	214	46%	70	27%	485 29%

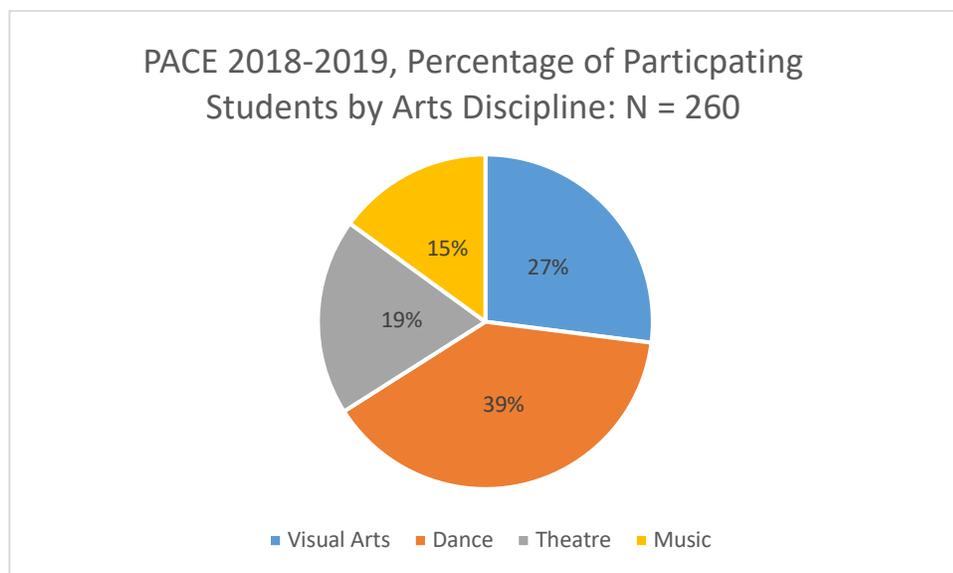
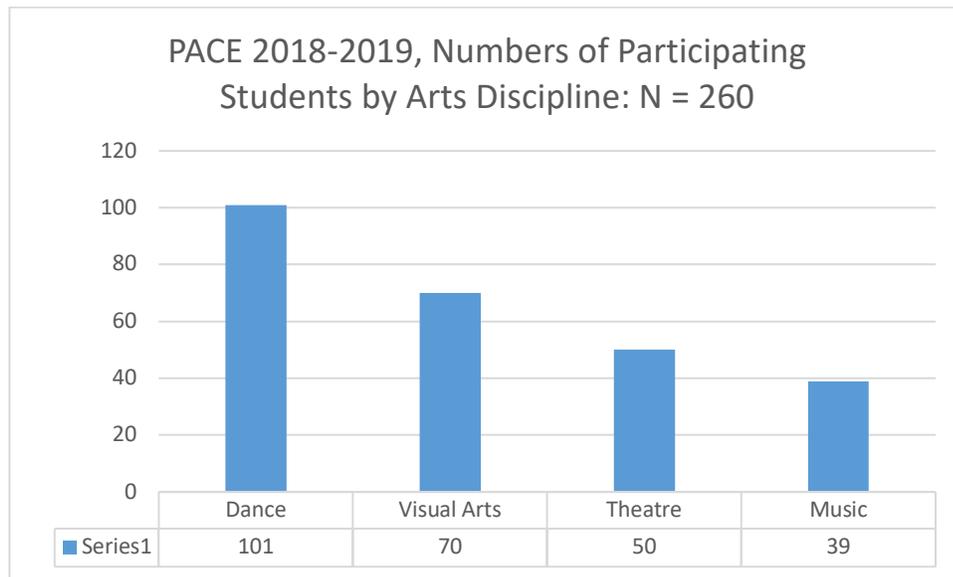
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In the 2015-2016 PACE program two schools represented theatre and single schools represented dance and visual arts each. Music was not included in the 2015-2016 PACE program. The addition of South Wayne and Van Buren elementary schools for the 2016-2017 academic year contributed to balancing representation of the arts disciplines among the schools in the study with two schools per discipline for all three participating disciplines (dance, theatre, and visual arts). Students in all schools who participated on the 2015-2016 PACE programs continued their participation in the 2016-2017 PACE program. Music was not included in the 2016-2017 PACE program. With the loss of a single school, involved in the PACE theater program, the previous balance among schools in each discipline shifted from having two schools per discipline to having two schools participating in dance and visual arts and a single school participating in theatre in 2017-2018. Music was not included in the 2017-2018 PACE program. With addition of two new schools, Kendall Elementary School and IPS School 51, in 2018-2019, a single school represented each of the arts. Kendall Elementary focused on

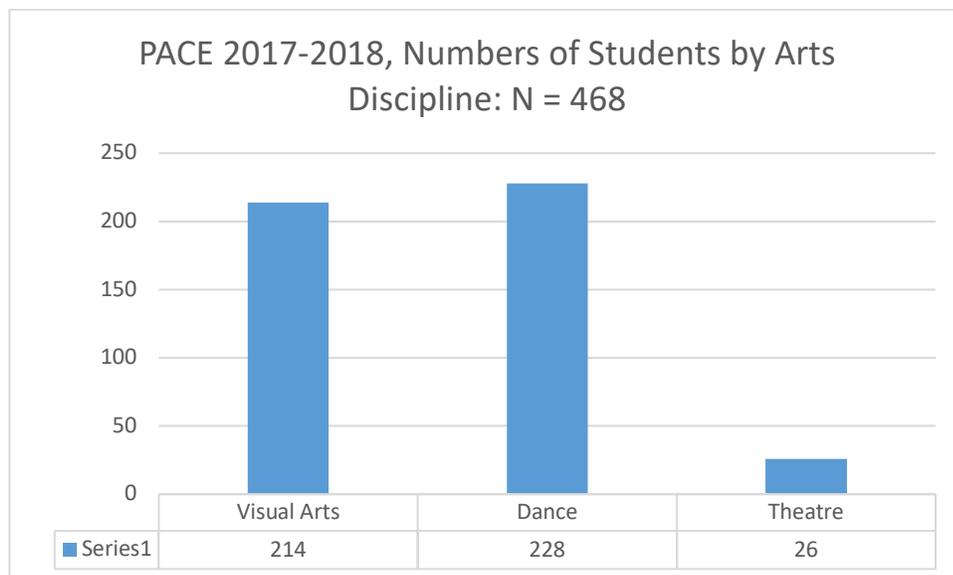
music and Indianapolis Public School 51 focused on theatre. Continuing PACE schools included South Wayne Elementary School in dance and Van Buren Elementary School in visual arts.

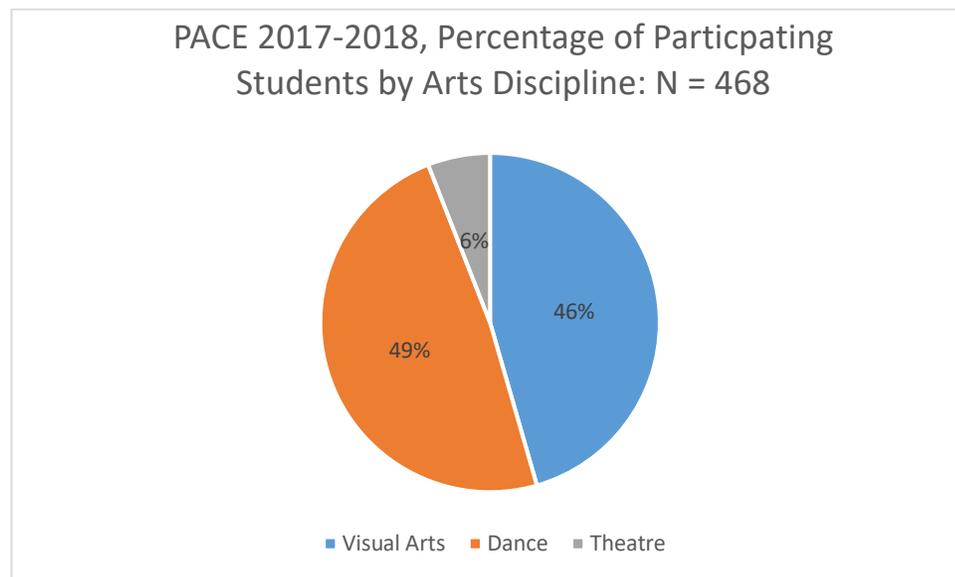
Comparisons of individual students' performances from the 2015-2016, 2016-2017, 2017-2018, and 2018-2019 assessments were not conducted. The inability to maintain intact class groupings from year to year and changes in individual student identity code numbers from one year to the next prevented the researcher from tracking individual student performances on assessments over the course of their involvement in the PACE program.

The 2018-2019 PACE program included a total of four elementary schools. Of these, South Wayne, with a total of 101 students, studied dance; Van Buren, with a total of 70 students, studied visual arts; IPS School 51, with a total of 50 students studied theatre, and Kendall, with a total of 39 students, studied music. An aggregated total of 260 students from these four schools participated in the 2018-2019 PACE program including 39% in dance, and 27% in visual arts, 19% in theatre, and 15% in music.

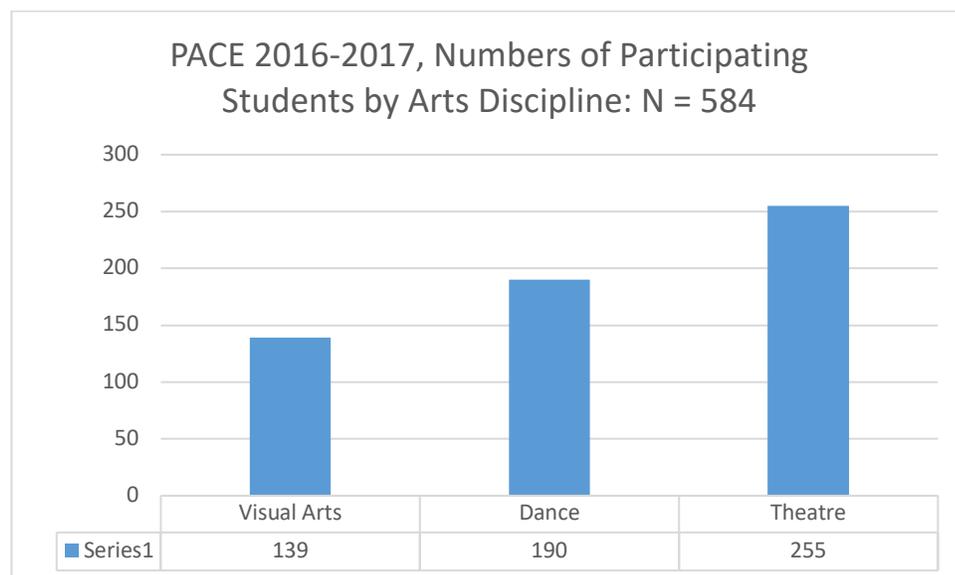


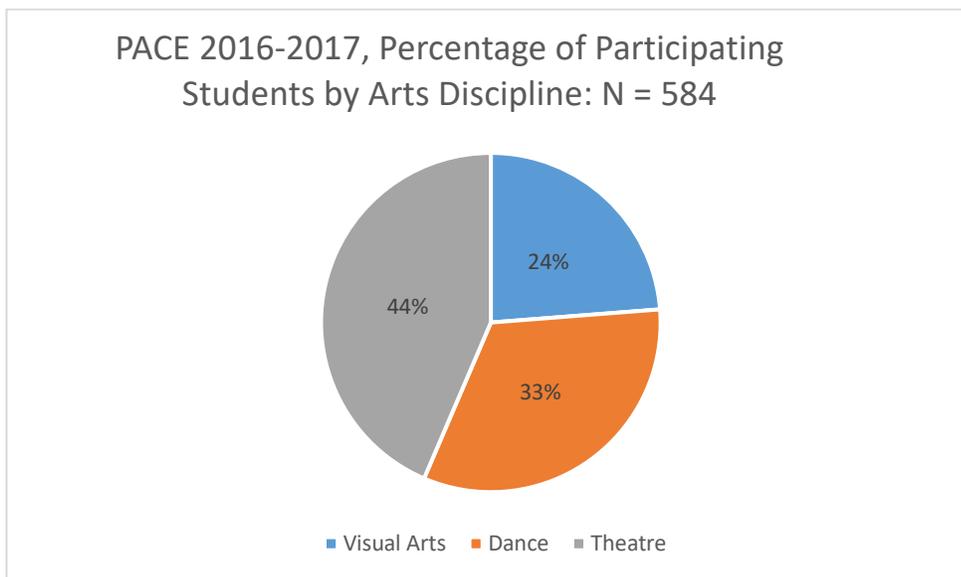
The 2017-2018 PACE program included five elementary schools. Of these, two schools (Pine and South Wayne), with a total of 228 students (49%), participated in studying dance; two schools (Meadows and Van Buren), with a total of 214 students (46%), participated in studying visual arts; and one school (McKinley), with a total of 26 students (6%), participated in studying theatre. Across the three arts disciplines (dance, theatre, and visual arts), 468 students participated in the 2017-2018 PACE program.



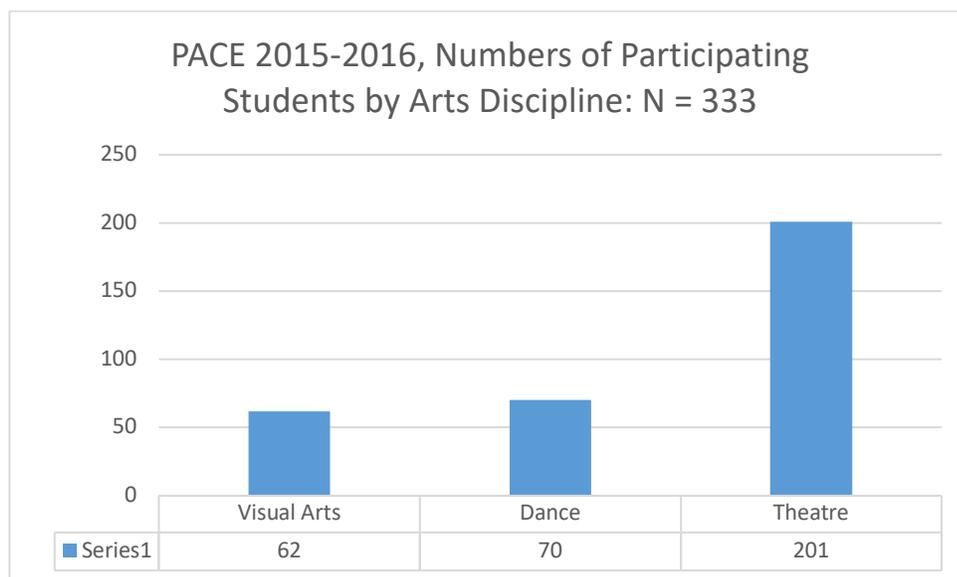


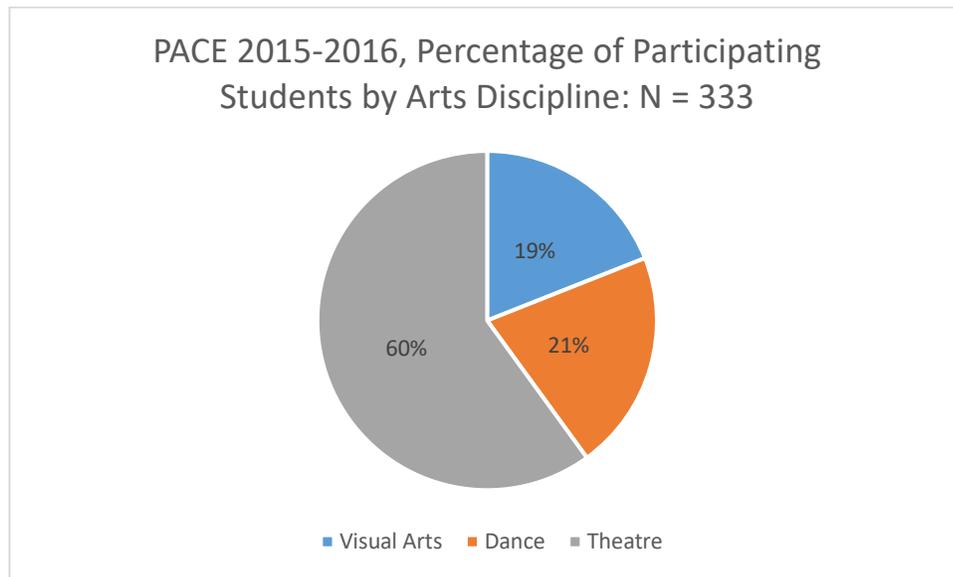
A total of 584 students from six schools participated in the 2016-2017 PACE program with 255 or 44% who studied theatre, 190 or 33% who studied dance, and 139 or 24% who studied visual arts.





A total of 333 students from four schools participated in the 2015-2016 PACE program. Of those 201 or 60% studied theatre, 70 or 21% studied dance, and 62 or 19% studied visual arts.



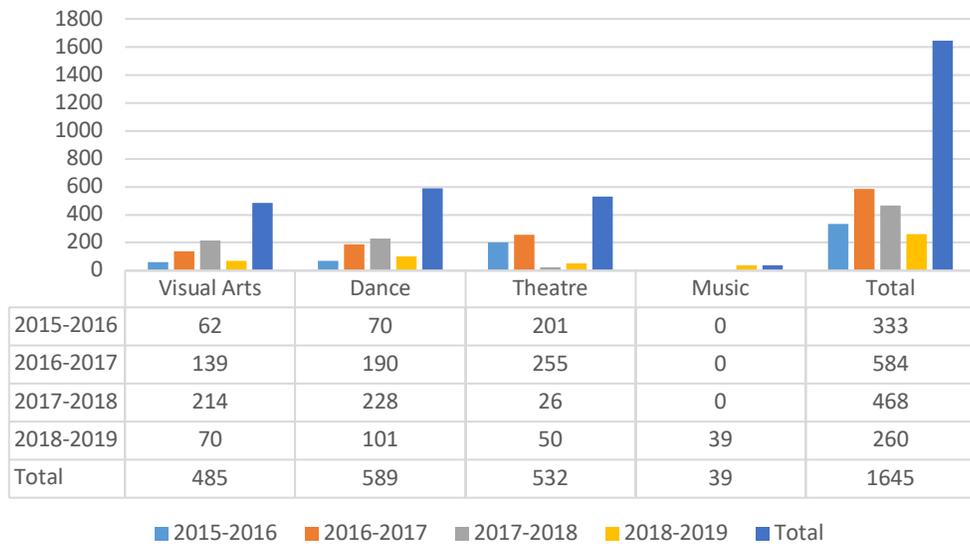


Although music education is included in the PACE program model, none of the participating schools in the 2015-2016, 2016-2017, or 2017-2018 programs included music education as part of their PACE arts discipline focus. Music was added to the PACE program in 2018-2019.

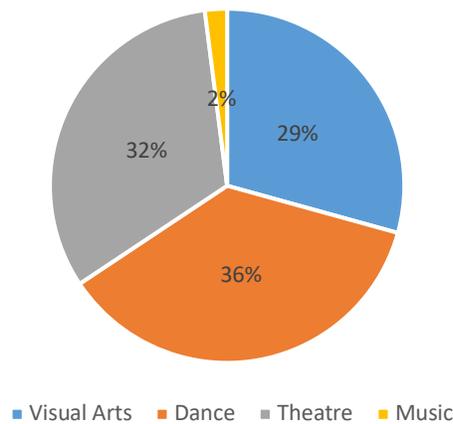
Over the four year period of this study, 1,645 students from seven elementary schools participated in the PACE program. Students involved in each of the arts disciplines included 589 students or 36% in dance; 532 students or 32% in theater, 485 students or 29% in visual arts, and 39 students or 2% in music.

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**PACE, 2015-2019, Total Numbers of Participating Students by Arts Discipline and Year: N = 1,645**



**PACE 2015-2019, Percentage of Participating Students by Arts Discipline: N = 1,645**



## Data Sources

Data from the PACE program were collected by the four participating schools during the 2018-2019 academic year. The Indiana Arts Commission for analysis provided complete data sets from each of the schools to the principal investigator. In order to assess the outcomes of the PACE program, five independent measures were created by members of the IAC in collaboration with the principal investigator. The instruments were designed to measure progress toward accomplishing the goals set forth for the PACE program. Each of the measures was implemented by the teachers and teaching artists with students twice over the academic year - once in the fall semester and again in the spring semester. Multiple implementations of assessments were conducted at intervals in order to gather data needed to track the effect of instruction, changes in student learning, and growth over time during their involvement in the PACE program.

The measures included discipline specific content related to dance, music, theatre, or visual arts; however, the themes and structures of the measures were replicated in all measures to enable cross-discipline comparisons of data produced by the measures. Piloting schools selected assessment instruments with the arts discipline content that matched the arts discipline on which their individual schools focused. All identifying information about participating students was removed from data and coded in order to protect the identities and privacy rights of all students. Data sets provided to the principal investigator for analysis had no identifying information for subjects.

The first measure, the *PACE Student Survey, Assessment A. B.* (See Appendix C), included three items about students' awareness and understanding of the arts discipline selected by the participating school. The teaching artist or arts teacher gave the Survey two times (fall and spring) during the school year. Teachers typically deliver questions on the first grade instrument orally and students provided their answers on a response sheet that included assorted emoticons to record their responses. However, because no first grade students participated in the 2018-2019 PACE program, these data were not collected. Students from grades 2 through 5 used the same instrument, but provided their responses on a checklist provided to them.

The second assessment, the *PACE Student Knowledge and Vocabulary Survey, Assessment C* (See Appendix D), was targeted toward measuring student's knowledge about the specific arts discipline (dance, music, theatre, or visual arts) featured at the participating school. The instrument included eight items. The first three items focused on general knowledge related to the featured discipline. The remaining five items measured students' knowledge of vocabulary or terms identified by the teaching artist and arts teacher in the participating schools. The instrument was implemented during the fall and spring semesters.

Student skills were measured during the fall and spring semesters of the academic year using the third assessment, *PACE Artist Assessment of Individual Student Skills, Assessment D* (See Appendix E). The instrument included six items. The first three items were similar on the measures created for the four arts disciplines and focused on students' demonstrations of arts specific skills, application of practices, tools, or materials in the creative process, and understanding and application of the sequence/process for creating an activity or work in the

discipline. Three additional skills that the teaching artist and participating school's arts teacher identified were added to the instrument and assessed independently from those identified at other participating PACE schools.

The fourth assessment instrument in the PACE program was used to measure student writing samples. Student writing samples were facilitated through use of a list of sample PACE writing prompts and evaluated using the *PACE Student Writing Samples Prompts, Assessment E* (See Appendix F). Criteria for evaluating student-writing samples were clustered under the categories of *Ideas and Content*, with three supporting criteria, *Organization*, with two supporting criteria, and *Writing Conventions*, with one supporting criterion. Student writing skills were measured during the fall semester and again in the spring semester. Participating PACE schools created school and discipline specific writing prompts (See Appendix F and Table 7.)

During the 2017-2018 PACE program, one additional assessment was reintroduced, *the PACE Student Attitude During Art Activities, Assessment F* (See Appendix G). This assessment was conducted during the 2015-2016 study of the PACE program. However, following an administrative decision to reduce the workloads of arts educators and teaching artists in the PACE program, this assessment was discontinued during the 2016-2017 study. Upon further reflection, it became evident that measurement of student attitudes about their engagement in the PACE program was essential for gauging the short and long-term impact and development of their attitudes about the arts and about their engagement with the PACE program.

After modifications and revisions on this instrument, the *PACE Student Attitude During Art Activities* assessment was re-implemented for the 2017-2018 study and utilized again in the 2018-2019 programs. This assessment was completed by the arts teachers or teaching artists. Students' attitudes related to (1) *Engagement*, (2) *Self-Esteem/Confidence*, and (3) *Communication/Interaction* were evaluated. A rubric for evaluating these attitudes was provided to participating schools. (See Appendix G). Student attitudes were measured during the fall semester and again in the spring semester.

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## Procedure

Descriptive statistics were used to summarize analyses of data sets. Data from the four school subgroups were aggregated and analyzed. Reports of findings from each of the five measures are provided below in this report. Descriptive statistics were used to summarize aggregated findings for the variables being studied within the four school groups. In addition to discussion of the findings, graphs, tables, and figures of key findings are included to illustrate information in this report. Additional reported findings include aggregated summaries of performances on all assessments from all participating PACE programs for the period from 2015 through 2019 during which this ongoing study has been conducted.

## REPORT OF FINDINGS

**T**his report of findings for the PACE program is descriptive in nature. It includes reports for items contained on five assessment instruments created to measure student achievement and learning in the program. Descriptions of the meaning and interpretation of the findings is included in the Discussion section of this report.

Findings in the report are clustered into the following groups including students' general interest in the art form they studied, discipline specific knowledge and vocabulary, discipline specific skills, student writing skills about the art form they studied, and student attitudes related to arts learning and arts engagement.

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### Aggregated PACE Program Reports

Data collected from each of the four participating schools in the 2018-2019 program and from each of the five assessment tools used in the study were analyzed separately. Reports of findings for each school and for each assessment tool were created.

Data from each of the separate schools' reports were combined to create aggregated data banks for the 2018-2019 PACE program. Findings from aggregated PACE data for each of the five assessment tools were analyzed and will be reported for the 2018-2019 academic year.

Additional combined data banks were created for data collected from all participating schools for the full duration of the PACE program from 2015 through 2019. Analysis of aggregated findings for each assessment tool also will be reported separately for all seven participating schools for the combined 2015-2019 PACE program. The report of findings follows.

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### PACE Student Survey Report

All students in the PACE program were asked to respond to three items on a questionnaire about their general knowledge of and interest in the art form being studied in the PACE program at their school. Items were modified by the participating school to include the correct arts discipline in which the school's PACE program was engaged. Items on the questionnaire included the following:

Question 1: I like to (make art, dance, make music, act like someone else or something else).

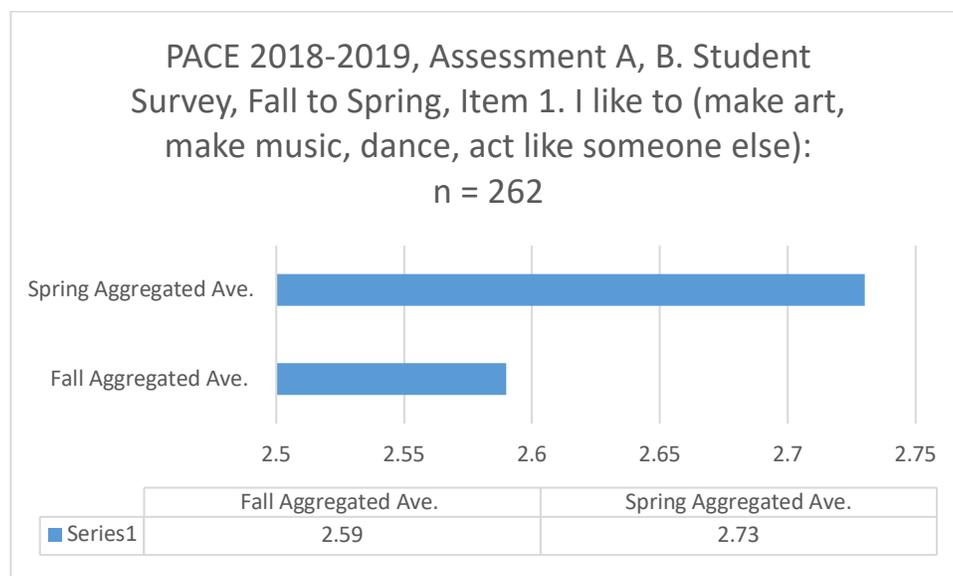
Question 2: I want to learn more about (art, dance, music, theatre).

Question 3: I think learning about (art/making art, dance/dancing, music/making music, theatre/acting) is an important part of school.

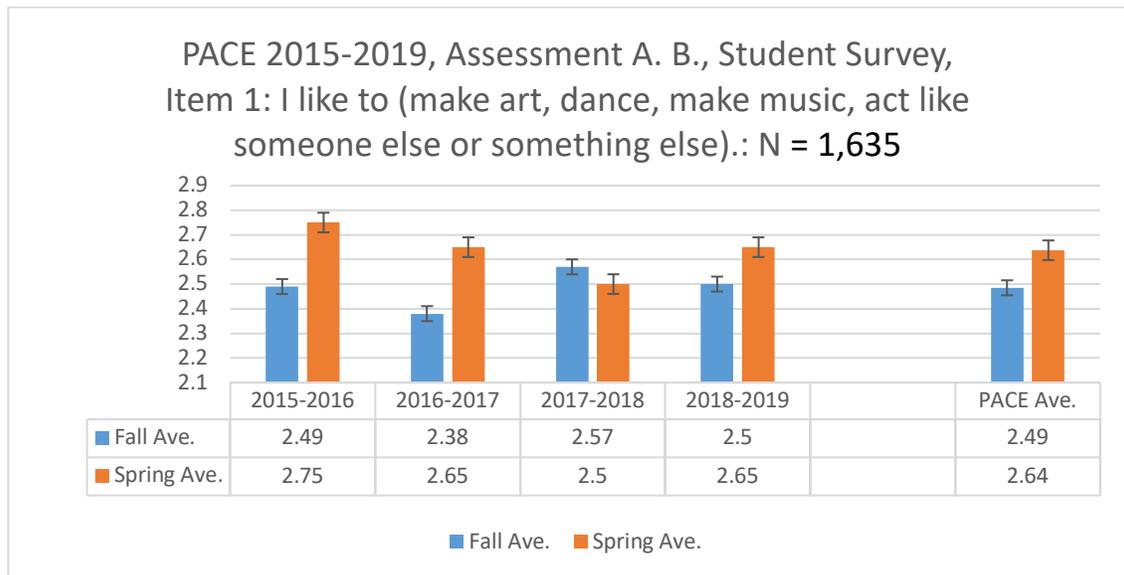
Students were asked to respond to each item using a three-point scale from “Totally Agree,” “Agree,” to “Not Really.” An aggregated number of 262 students from the four participating schools responded to these items in 2018-2019.

Students were asked whether they like to either make art, make music, act like someone or something else, or dance (Question 1). Responses for this item were combined for all grade levels within the participating school.

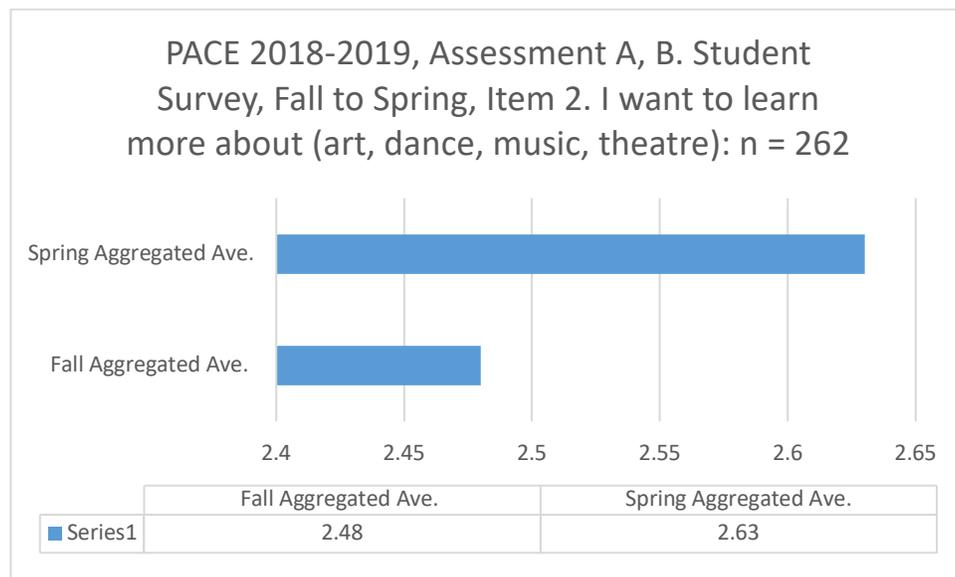
The 2018-2019 aggregated average score for this item went from 2.59 during the fall semester to 2.73 in the spring. This item produced ranges from 2.39 to 2.81 in the fall semester and from 2.53 to 2.9 in the spring semester. Kendall Elementary School experienced the largest increase on this item with an increase of .32 points from the fall to spring assessments. South Wayne Elementary and IPSA School 51 both experienced lower increases of .07 points each on this item in scores between the fall and spring assessments.



Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for this item, reveal that the aggregated fall average for this period rose from 2.49 to 2.64 for an increase of .15 points (6%). A total of 1,635 students completed this item for this period. The average for this item from the 2015-2016 cohort rose from 2.49 points on the fall assessment to 2.75 points on the spring assessment or an increase of .26 points (10%). The fall average for this item from the 2016-2017 cohort rose from 2.38 points in the fall to 2.65 points or an increase of .27 points (11%) in the spring assessment. The fall average for this item in the 2017-2018 cohort remained stable at 2.5 points for the fall and spring assessments. The fall average for this item in the 2018-2019 cohort rose from 2.5 to 2.65 points (6%) in the spring assessment. It is of note that the average fall scores from 2015-2016 to 2018-2019 experienced fluctuations during each year of the study with the 2017-2018 cohort producing the highest average fall score of 2.57 and the 2016-2017 cohort producing the lowest fall average score of 2.38 points. In addition, the average spring score for this item produced consistent declines from the 2015-2016 (2.75) cohort through the 2016-2017 and 2017-2018 cohorts (2.65 and 2.57 respectively). However, the spring 2018-2019 cohort produced a gain of .15 points. Decreases in the spring-aggregated averages for this item are not significant. Average aggregated scores for this item during the period from 2015-2016 through 2018-2019 remained positive and consistent across all four sets of subjects and among all grade levels over the period of the study. These performances suggest that PACE students like to make art, make music, act like someone else, or dance.

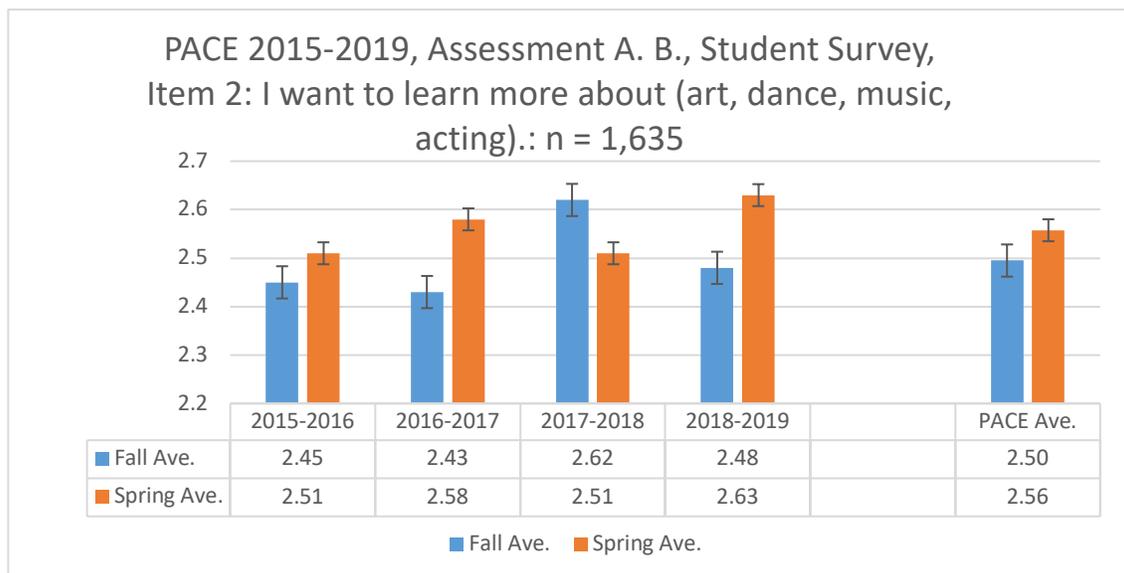


Students were asked if they wanted to learn more about either art, dance, music, or theatre (Question 2). The 2018-2019 aggregated average score for this item rose from 2.48 during the fall semester to 2.63 in the spring semester. This item produced ranges from 2.43 to 2.55 in the fall semester and from 2.46 to 2.85 in the spring semester. Van Buren experienced the largest increase on this item with an increase of .33 points from the fall to spring assessment. IPS School 51 and South Wayne experienced the smallest increases of .03 points each on this item for scores between the fall and spring measurements.



Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for this item, reveal that the aggregated fall and spring averages for the PACE program over the course of this study remained stable at 2.50 and 2.56 points respectively. A total of 1,635 students completed this item during this period. The average for this item from the 2015-2016 cohort rose from 2.45 points on the fall assessment to 2.51 points or an increase of .06 points (3%) on the spring assessment. The fall average for this item from the 2016-2017 cohort rose from 2.43 points in the fall to 2.58 points or an increase of .15 points (6%) in the spring assessment. The fall average for this item in the 2017-2018 cohort fell from 2.62 points for the fall to 2.51 points on the spring assessment or a decrease of .11 points (4%). The fall average for this item in the 2018-2019 cohort rose from 2.48 to 2.63 or an increase of .15 points (6%). The average fall scores for this item from 2015-2016, 2016-2017, and 2018-2019 cohorts were stable (2.45, 2.43, and 2.48 respectively); however, the 2017-2018 fall aggregated average was higher (2.62)

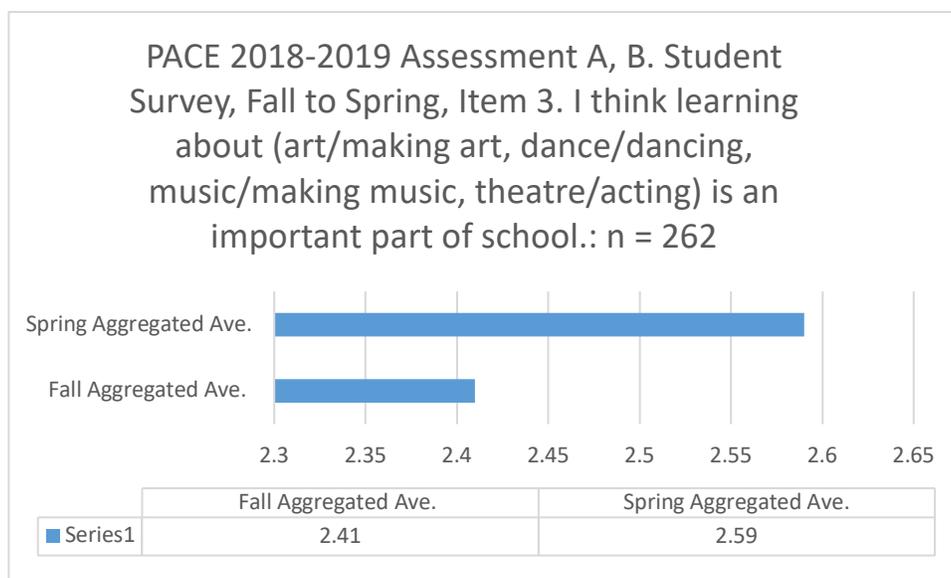
than the fall averages produced by any of the previous cohorts. In addition, the average aggregated spring score for this item produced identical aggregated spring averages (2.51) in both the 2015-2016 and 2017-2018 cohorts. The spring decrease of .11 points from the fall to spring average in the 2017-2018 cohort is not significant. The 2018-2019 cohort produced the largest increase from fall to spring assessments for this item (.15 points) compared to increases from all previous cohorts. Findings for the period from 2015-2016 through 2018-2019 suggest that students' interest in wanting to learn more about dance, art, music, theatre/acting remained positive and consistent across all four sets of subjects and among grade levels over the period of the study.



Students were asked if they think learning about art and making art, dance and dancing, music and making music, and theatre and acting is an important part of school (Question 3).

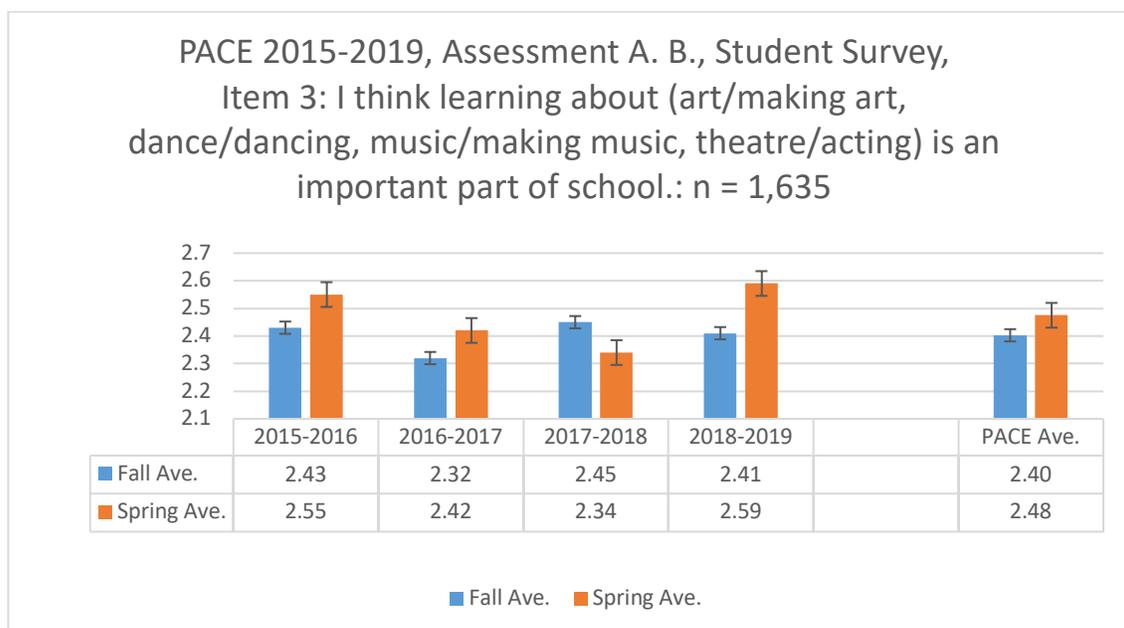
The 2018-2019 aggregated average score for this item fell from 2.41 during the fall semester to

2.59 in the spring semester for an increase of .18 points. This item produced ranges from 2.17 to 2.59 in the fall semester and from 2.45 to 2.83 in the spring semester. IPS School 51 was the single school experiencing a decrease in its aggregated averages for this item, with a minor decrease from 2.53 on the fall assessment to 2.47 on the spring assessment or a decrease of .12 points. All other schools experienced increases in aggregated scores for this item. The largest increase from 2.31 points on the fall assessment to 2.63 points on the spring assessment or a decrease of .32 points occurred at Kendall Elementary School. Increases at the other schools were smaller with a range from .28 points at South Wayne and .26 points at Van Buren.

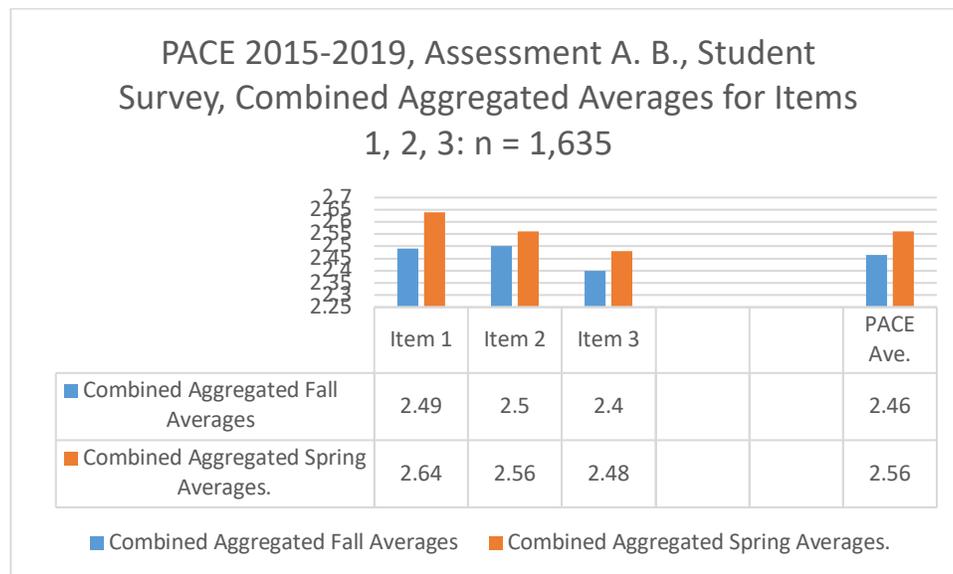


Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for this item, reveal that the aggregated fall and spring averages for this period remained stable at 2.40 and 2.48 points respectively. A total of 1,635 students completed this item during this period. Comparisons of findings from the 2015-2016 through the 2018-2019 fall assessments reveal

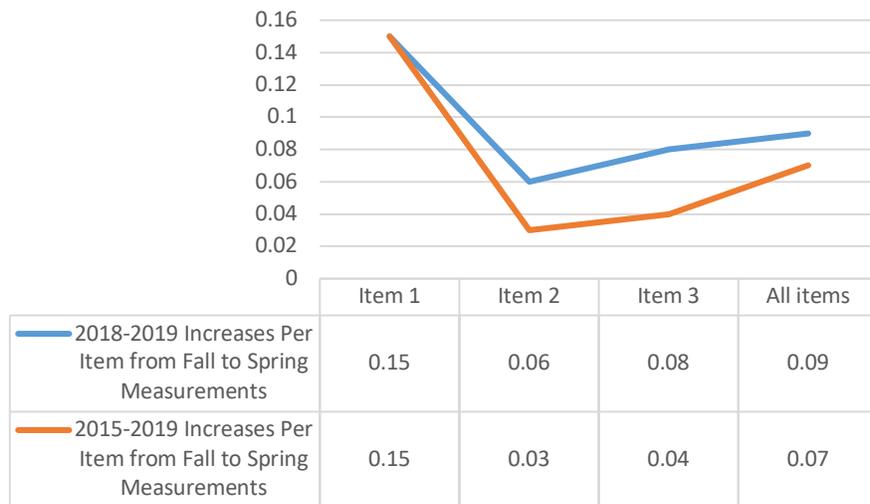
that the aggregated averages from the 2017-2018 assessments produced a slightly higher average for this item (2.45) than the 2016-2017 assessments (2.32), the 2015-2016 assessments (2.43), and the 2018-2019 assessment (2.41). Spring assessment averages reveal that the 2018-2019 spring assessment was the highest among cohorts (2.59) followed by the 2015-2016 spring average was 2.55, and the 2016-2017 average of 2.42. The 2017-2018 spring average was the single cohort producing a decrease from 2.45 in the fall to 2.34 in the spring or a decrease of .11 points for this item. Aggregated averages suggest a slight increase of .08 points (4%) across the four-year period for this item. This trend does not suggest significant shifts in students' overall responses for this item. These findings suggest that students' responses about whether learning about art and making art, dance and dancing, music and making music, and theatre and acting is an important part of school are stable, positive, and consistent within the PACE project and across grade levels over the four-year duration of the study.



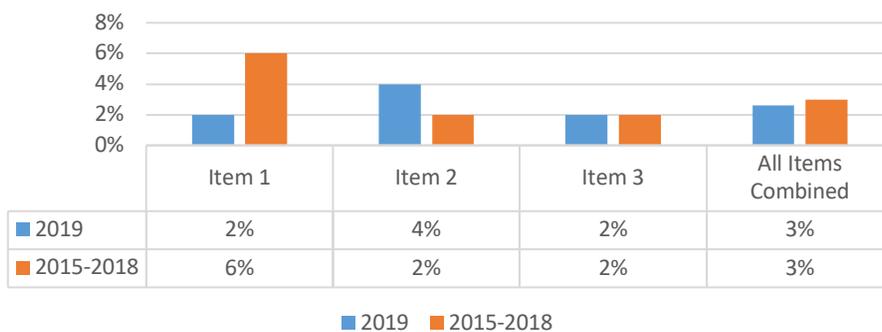
Comparisons of the fall and spring aggregated average scores across all items on the Student Survey instrument and from all assessments from participating schools for the period of 2015-2016, 2016-2017, 2017-2018, and 2018-2019 reveal that the fall aggregated average of 2.46 points for all items on the instrument rose on the spring assessment to 2.56 points or .10 points (4%). The largest increase was experienced for Item 1, I like to (make art, dance, make music, act like someone else or something else) with an increase of .15 points (6%). This was followed by an increase of .08 points (4%) on Item 3, I think learning about (dance/dancing, art/making art, music/making music, theatre/acting) is an important part of school and an increase of .06 points (3%) on Item 2, I want to learn more about (art, dance, music, acting). Although scores from all three assessments on each item demonstrated minimal, positive growth, scores remained stable and positive for the period under study.



**PACE 2015-2019, Assessment A, B, Student Survey, Fall to Spring Point Increases, All Items:  
n = 1,635**



**PACE 2015-2019, Assessment A. B., Student Survey, Aggregated Averages for Items 1, 2, 3, Combined, Percent of Spring Increase from Fall  
Aggregated Averages: n = 1,635**



## PACE Knowledge and Vocabulary Survey Report

The arts have discipline specific knowledge and skills that can be taught and learned (Eisner, 2002; Sabol, 2010, 2013). Comprehensive education in the arts depends upon enabling students to receive instruction in the arts and in providing educational experiences that require students to learn and use various kinds of knowledge and skills identified by the various arts disciplines (Drake, 1998; Sabol, 2009, 2010). Measuring what students know and can do in the arts is central for understanding learning and achievement in the arts and for creating, implementing, and revising curriculum, instruction, and assessment in the arts.

The PACE program created instruments through which students' arts knowledge could be measured and tracked over time. Four discipline-specific instruments (dance, music, theatre, and visual arts) were designed for this purpose (See Appendix D). The PACE Knowledge and Vocabulary Assessment consists of eight items that were scored on a 0 to 3-point scale. The first three items address general knowledge about the specific art form at the individual PACE school sites. Although common language and themes were used among the first three items, phrasing of the items varied to included language related to the art form the discipline-specific instrument was designed to measure. For example, Item One on the Dance Knowledge Assessment instrument read, "Describe some different kinds of dance?" while Item 1 on the Visual Arts Knowledge Assessment instrument read, "Describe some different kinds of art?" Both items were designed to measure students' general knowledge about the specific art form being focused upon at the PACE school sites. In this way cross comparisons of student

knowledge about the art forms could be made across PACE schools, across arts disciplines, and over time. Below is a listing of the first three of eight items used in all PACE schools to measure students' arts knowledge:

Question 1: Describe some different kinds of (art, dance, music, theatre).

Question 2: Where would you go to see (artwork, dancers, music, theatre)?

Question 3: Do people (make art, dance, make music, act) just for enjoyment, or can (making art, dancing, making music, acting) also be a job to earn money?

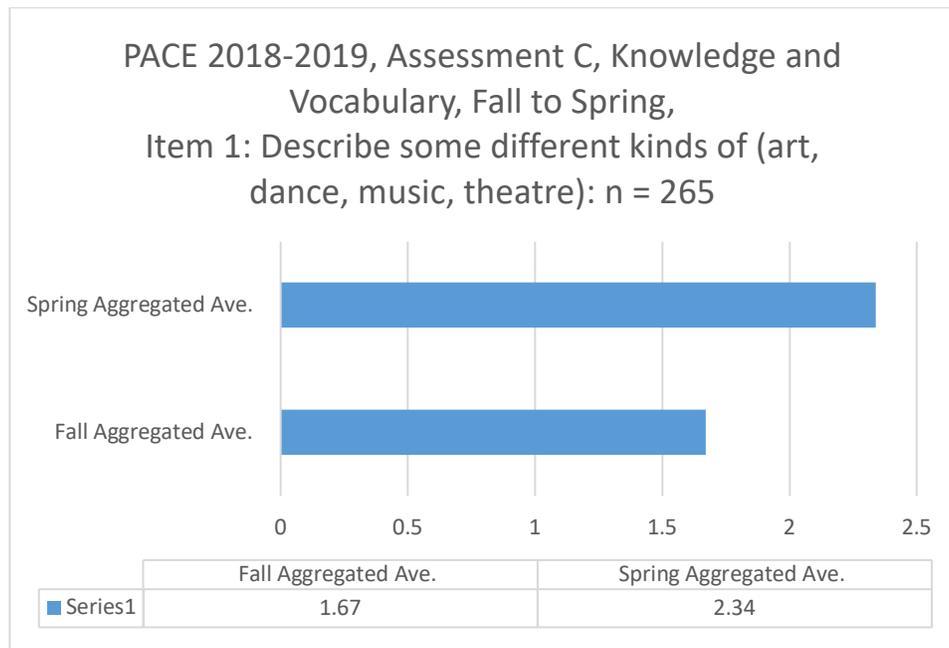
The remaining five items on the instruments permitted the visiting artists and arts teachers in each school site and arts discipline to select specific vocabulary terms that would be taught to students and used by them. These terms also would become markers to be identified and tracked in student writing samples. Student writing samples (See PACE Student Writing Samples Report below) related to arts learning were evaluated using separate discipline-specific assessments in the form of writing prompts and a rubric (See Student Writing Samples Report and Appendix F).

PACE 2018-2019 students were asked to describe some different kinds of art, dance, music, or theatre (Question 1). Their average aggregated fall response was 1.67, indicating a better than average (1.50) knowledge about these arts disciplines. The range of fall scores was from 1.17 at IPS School 51 to 2.06 at Van Buren Elementary School. The spring PACE aggregated average score was 2.34. This is an increase of .67 points (29%) from the fall assessment. The range of spring scores was from 1.24 at IPS School 51 to 2.27 at Kendall Elementary school. The

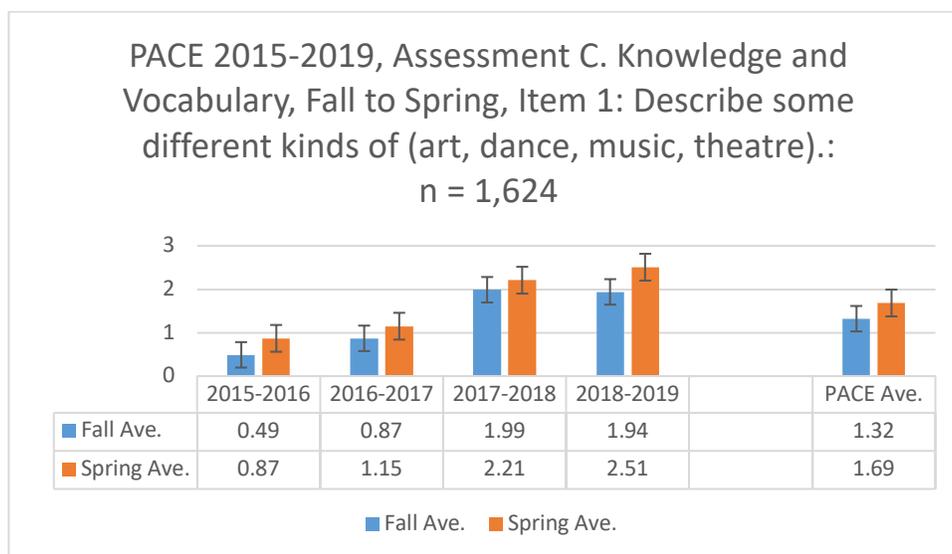
largest increase was produced by IPS School 51 with an increase of 1.28 points from the fall to spring assessments, followed with increases by Van Buren Elementary School (.67), South Wayne (.34), and Kendall (.26).

Average aggregated scores by discipline for this item included an increase from 1.67 on the fall assessment to 2.34 on the spring assessment or an increase of 29%. This included increases (1.04 points or 41%) for theatre, an increase for visual arts (.51 points or 22%), an increase for music (.50 points or 25%), and an increase for dance (.25 points or 11%).

Schools producing increases for this item experiencing modest increases from the fall to spring assessments with one school producing a notable increase of 41% on this item from the fall to spring assessments. All spring averages for this item were near or above 2.00 levels and varied among disciplines.

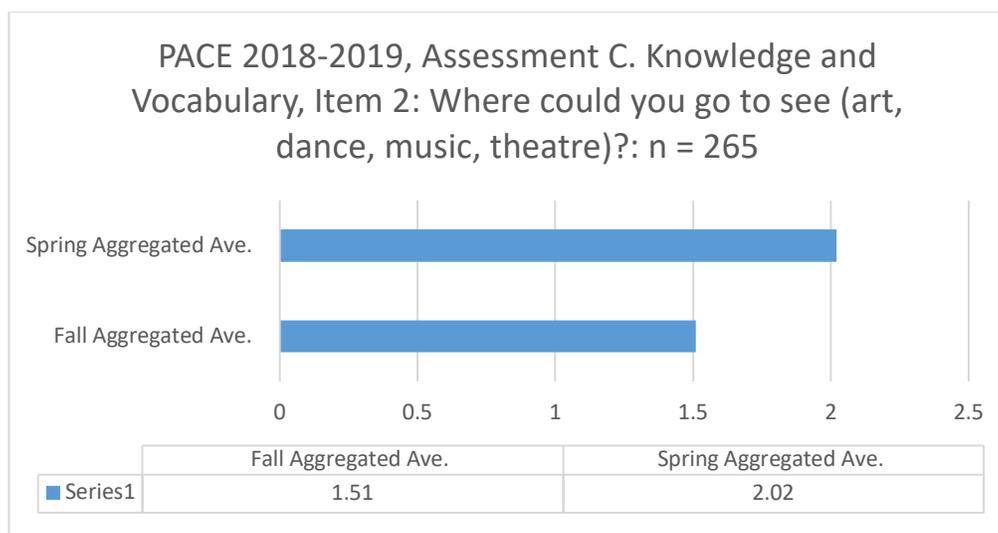


Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Item 1, Describe some different kinds of (art, dance, music, theatre) reveal that the aggregated fall and spring averages for this period increased from 1.32 to 1.69 or an increase of .37 points (22%). A total of 1,624 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a slightly higher average for this item (1.99 points) than the 2018-2019 assessments (.1.94 points), 2016-2017 assessments (.87 points), and the 2015-2016 assessments (.49 points). Spring assessment averages over the duration of the study reveal that the 2018-2019 average was the highest (2.51) followed by the 2017-2018 average (2.21), 2016- 2017 average(1.15), and 2015-2016 average (.87). Increases in these averages over each year of the program suggest that students in the PACE program are consistently improving in their ability to describe different kinds of art, dance, music, or theatre.

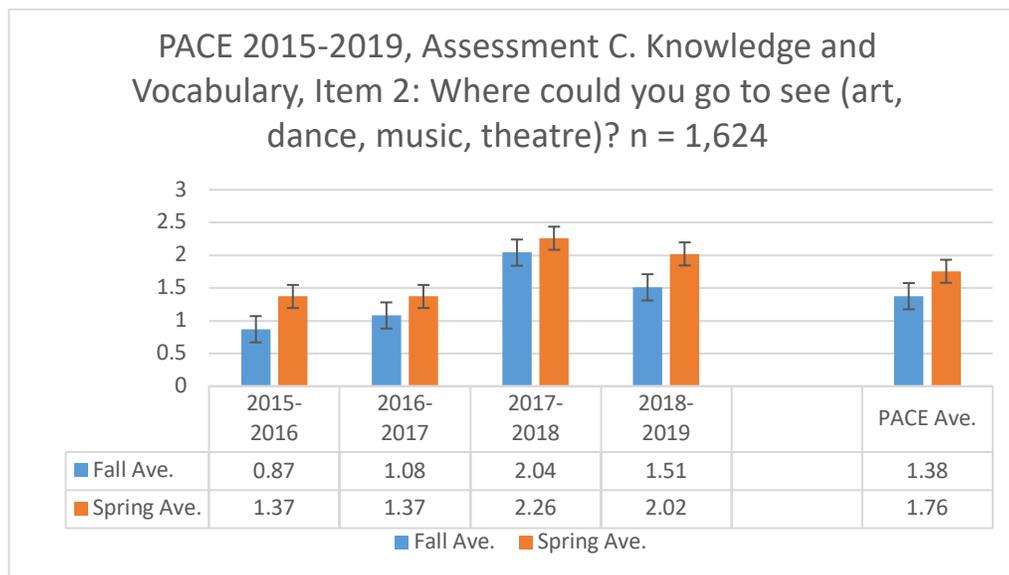


PACE 2018-2019 students were asked where they could go to see art and artists, dance and dancers, music and musicians, or theatre and actors (Question 2). Their average aggregated fall response was 1.51. The range of fall scores was from 1.17 at IPS School 51 to 2.06 at Van Buren Elementary School. The spring PACE aggregated average score was 2.02. This is an increase of .85 points (26%) from the fall assessment. The range of spring scores was from 2.27 at Kendall Elementary school to 2.88 at South Wayne Elementary School. The largest increase was produced by IPS School 51 with an increase of 1.32 points or 52% from the fall to spring assessments, followed with increases by South Wayne .68 points or 24%, Van Buren .29 points or 23%, and Kendall with no change in the fall to spring score of 2.27 (.0 points or 0%).

Three schools produced increases for this item experiencing good to very good increases from the fall to spring assessments. The single school (IPS School 51) produced strong growth for this item that is noteworthy with an increase of 52%. This represents the second largest single improvement for any item on fall to spring scores for this assessment.

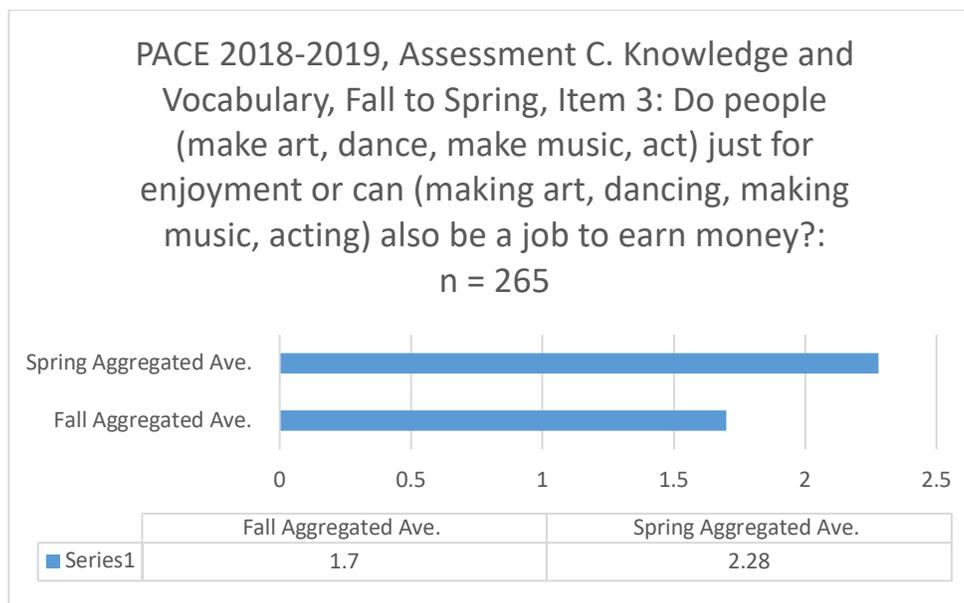


Comparisons of PACE 2015-2016 through 2017-2019 aggregated average scores for this item, reveal that the aggregated fall and spring averages for this period increased from 1.38 to 1.76 respectively or an increase from fall to spring assessments of .38 points (22%). A total of 1,624 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated averages from the 2017-2018 assessments produced nearly a full point higher average for this item (2.04) than the 2016-2017 assessments (1.08), the 2015-2016 assessments (.87), and the 2018-2019 assessments (.51). This finding suggests that PACE students' knowledge of where they could go to see art, dancers, music, or theatre on all four of the fall assessments has produced increases during each year over the duration of the study for this item. Spring assessment averages over the duration of the study reveal that the 2018-2017 spring average was 2.26 followed by the 2018-2019 average of 2.02, and 2016-2017 and the 2015-2016 average of 1.37 each. These averages produced an increase of .38 points (22%) across the four-year period for this item. These findings suggest that students' responses about where they could go to see art, dance, music, or theatre are positive, consistent, and demonstrate growth across all grade levels over the four-year duration of the study of the PACE project.



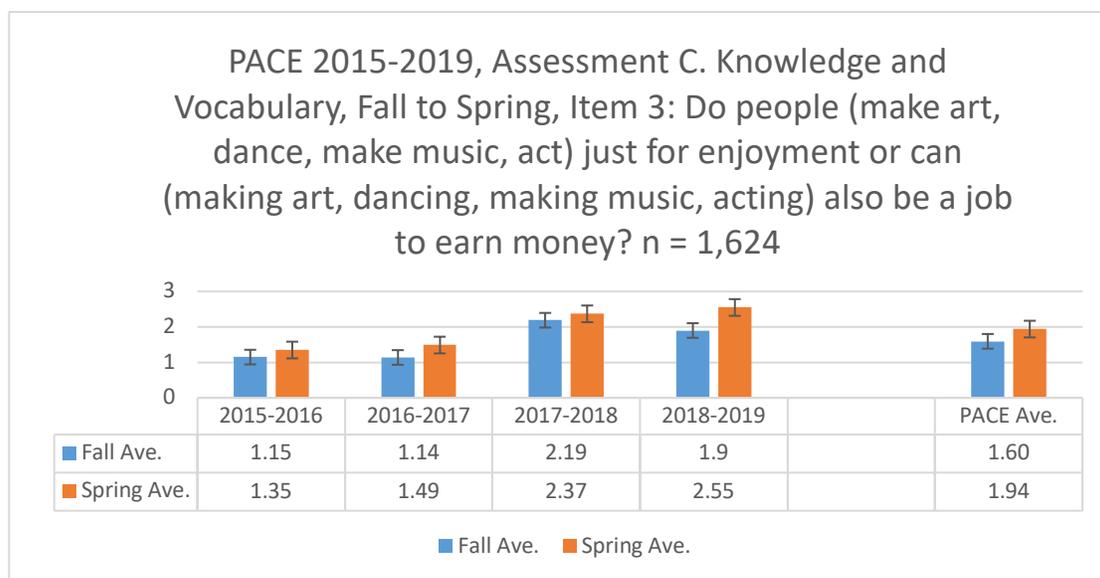
PACE 2018-2019 students were asked if people (make art, dance, make music, or act) just for enjoyment or whether (making art, dancing, making music, acting) can also be a job to earn money (Question 3). Their average aggregated fall response was 1.7, indicating a better than average (1.50) knowledge about whether making art, dancing, making music, or acting was just for enjoyment or if it could be a source of earning money. The range of fall scores was from 1.55 at IPS School 51 to 2.20 at South Wayne Elementary School. The spring PACE aggregated average score was 2.28. This is an increase of .58 points (25%) from the fall assessment. The range of spring scores was from 2.33 at Kendall Elementary School to 2.93 at South Wayne Elementary School. The largest increase was produced by IPS School 51 with an increase of 1.11 points (42%) from the fall to spring assessments, followed with increases by South Wayne Elementary School (.73 or 25%), Kendall Elementary School (.42 or 19%), and Van Buren

Elementary School (.65 or 15%). All schools demonstrated ranges of good to very good positive growth for this item.



Comparisons of PACE 2015-2016 through 2017-2019 aggregated average scores for this item, reveal that the aggregated fall and spring averages for this period increased from 1.60 to 1.94 respectively or an increase from fall to spring assessments of .34 points (18%). A total of 1,624 students completed this item during this period. Comparisons of fall to spring assessments for this item findings from this period reveal that the aggregated averages increased in descending order from the 2018-2019 assessment (.65 or 25%), 2016-2017 assessments (.35 points or 23%), 2015-2016 assessments (.20 points or 15%), and from the 2017-2018 assessments (.18 points or 8%). Spring assessment averages over the duration of the study reveal that the 2018-2019 spring average of 2.55 was followed by the 2018-2017 spring

average (2.37), 2016-2017 (1.49), and 2017-2018 (1.15) averages. These averages produced an increase of 1.2 (48%) points across the four- year period for this item and represent continuous growth for this item across all four years of the program. This increase also represents the highest area of growth for the period of the study on Assessment C, Knowledge and Vocabulary. These finding suggests that PACE students' know that making art, dancing, or acting can be a source of enjoyment, but also may be pursued as a job in order to earn money. Students' responses for this item are positive, consistent, and demonstrate continuous growth across all grade levels over the four-year duration of the PACE project.



Artists and teachers at PACE schools were asked to provide site-specific and discipline – specific vocabulary to be included in PACE arts instruction. Lists of discipline-specific vocabulary terms were not duplicated at the other PACE schools. Each school selected a total five site

specific and discipline specific vocabulary words for each grade level (See Table 2.). These terms were included on the corresponding vocabulary assessment for each grade level. Knowledge of the vocabulary terms was measured during the fall and again in the spring semesters.

Table 2

*2015-2019, Knowledge of Arts Vocabulary/Terms, Meadows, Van Buren, South Wayne, Pine, McKinley, IPS School 51, and Kendall: n = 1,287*

School/Vocabulary Terms	2015-2016 n = 201	2016-2017 n = 359	2017-2018 n = 462	2018-2019 n = 265
Meadows Elementary	Line Drawing Shape Color Space Artist Artwork Geometric Organic Painting  Sculpture Gallery	Three-dimensional Abstract Landscape Synesthesia Sculpture Realism Tessellation Graphic arts Illustrator Abstract Expressionism Color Painting Story quilt Media Additive Trompe l'oeil Subtractive Impressionism	Primary Colors Author Masterpiece Secondary Colors Illustrator Organic Shapes Overlap Geometric Shapes Fauvism Abstract	No Data

Van Buren  
Elementary

No Data	No Data	Art Diversity Medium Symbol Portrait Symmetry Self-Portrait Citizen Resources Goods and Services	Community Culture Environment Resources Career Landform Pioneer
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South Wayne  
Elementary

No Data	Locomotor Non-locomotor Shape Levels Pathways Improvise Qualities Dynamics Time Size Unison Groupings (solo/duet/ trio/quartet ensemble)	Locomotor Non-locomotor Shape Levels Pathways Improvise Qualities Dynamics	Collaboration Choreography Improvisation Levels Contrast Formation Ripple Shape
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Pine  
Elementary

Focus Shape Axial Locomotor Tableau Isolate Integrate Tempo Sustain Percussive Choreography Rehearsal	Focus Shape Axial Locomotor Tableau Isolate Integrate Tempo Sustain Percussive Choreography Rehearsal	Focus Shape Axial Locomotor Tableau	No Data
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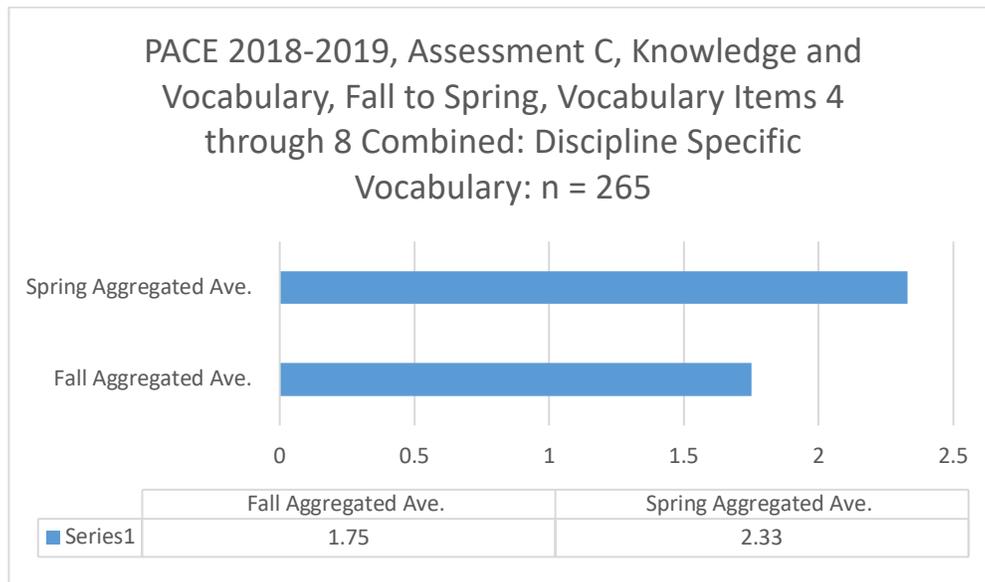
IPS School 51	No Data	No Data	No Data	Play Actor tools Ensemble Stage Voice Script
McKinley Elementary	Actor Acting Gestures Drama Fluency Expression Blocking Ensemble Imagination Articulation Character Dialogue	Actor Acting Gestures Drama Fluency Expression Blocking Ensemble Imagination Articulation Character	Actor Acting Gestures Drama Dialogue	No Data
Kendall Elementary	No Data	No Data	No Data	Melody Harmony Musician Rhythm Tempo

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The arts educators and teaching artists in participating schools select vocabulary within each PACE program for each advancing year of the program. Vocabulary may vary within schools and arts disciplines each year. Arts curricula scaffold from year to year and as cohorts enter more advanced grade levels, new or more complex vocabulary or terminology may be identified to match more complex learning and understanding of arts concepts and ideas. In some cases, the list of terms within a given discipline may not change from year to year. A total

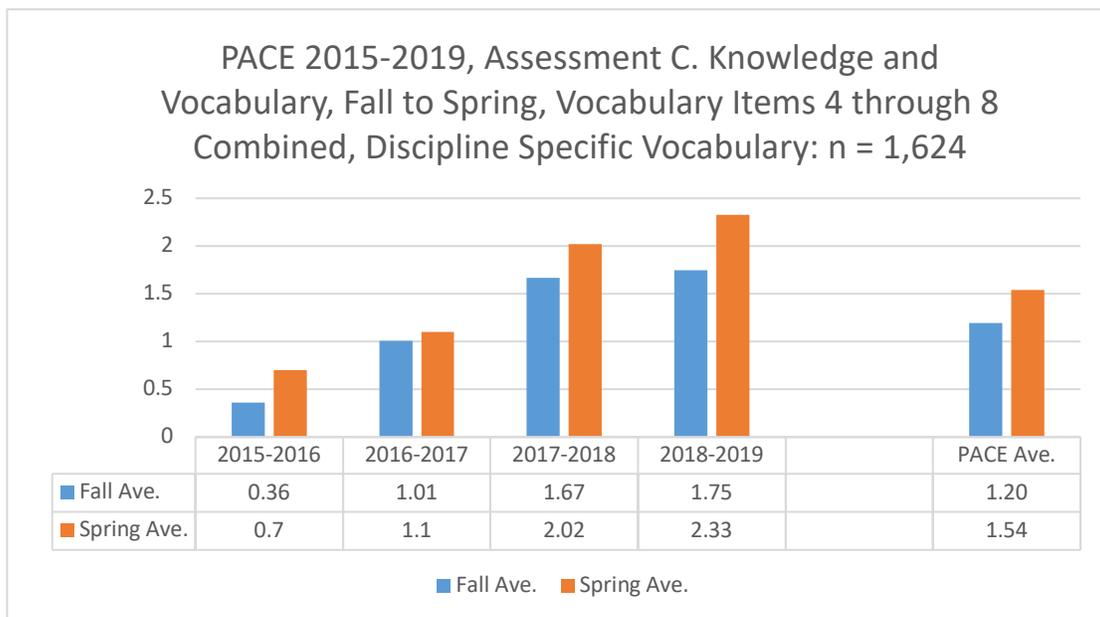
of 152 terms were identified among the four arts disciplines over the four-year period of the study (See Table 2.). Knowledge of vocabulary terms was measured during the fall and spring semesters. Over the four-year period of the study, one school did not collect data for the assessment of vocabulary for two consecutive years (2015-2016 and 2016-2017). This school submitted vocabulary data for the 2017-2018 academic year. Another school was added to the PACE program in 2016-2017. This school did not collect data for the 2015-2016 academic year. During the 2015-2016 study a total of 36 vocabulary terms were introduced. During the 2016-2017 study, 53 terms were introduced, followed by 38 terms in the 2017-2018 study, and 25 terms were added in 2018-2019. A review of vocabulary repeated within PACE programs from the initial year (2015-2016) through the current year (2018-2019), revealed that 28 vocabulary terms were repeated across this four-year period.

Aggregated averages from all schools for the 2018-2019 fall and spring vocabulary measurements were calculated. The PACE fall aggregated school averages for the vocabulary assessment items 4 through 8 was 1.75. The PACE spring aggregated averages from these schools was 2.33 or an increase of .58 points (25%). Improvements were produced on all vocabulary-related items from the fall to spring assessments, for all grade levels, and in all schools. The largest increases produced between the fall and spring vocabulary assessments were at IPS School 51 (.92 points or 37%) followed by Kendall (.61 points or 34%), Van Buren (.57 points or 26%), and South Wayne (.11 points or 5%). Aggregated averages indicate that students' understanding of vocabulary within their respective disciplines is approaching proficient levels of learning of the terms.



Comparisons of aggregated averages for vocabulary terms (items 4 through 8) from the 2015-2016 through 2018-2019 assessments, show improvement on both the fall and spring assessments. The PACE aggregated fall average for this period was 1.20 and rose to 1.54 (22%) on the aggregated spring assessment for these items. The aggregated average from the fall 2018-2019 was 1.75, followed by the 2017-2018 (1.67), 2016-2017 (1.01), and 2015-2016 (.36) assessments. Over the course of the four-year period of the program the average aggregated fall vocabulary score rose 1.39 points (81%). The aggregated spring average from the 2018-2019 assessment was 2.33, followed by the 2017-2018 assessment average of 2.02, followed by the 2016-2017 assessment of 1.10 points, and the spring 2015-2016 assessment average of .70 points. Over the course of the four-year period of the program the average aggregated spring vocabulary score rose by 1.63 points (70%). Fall and spring increases for this item represent the

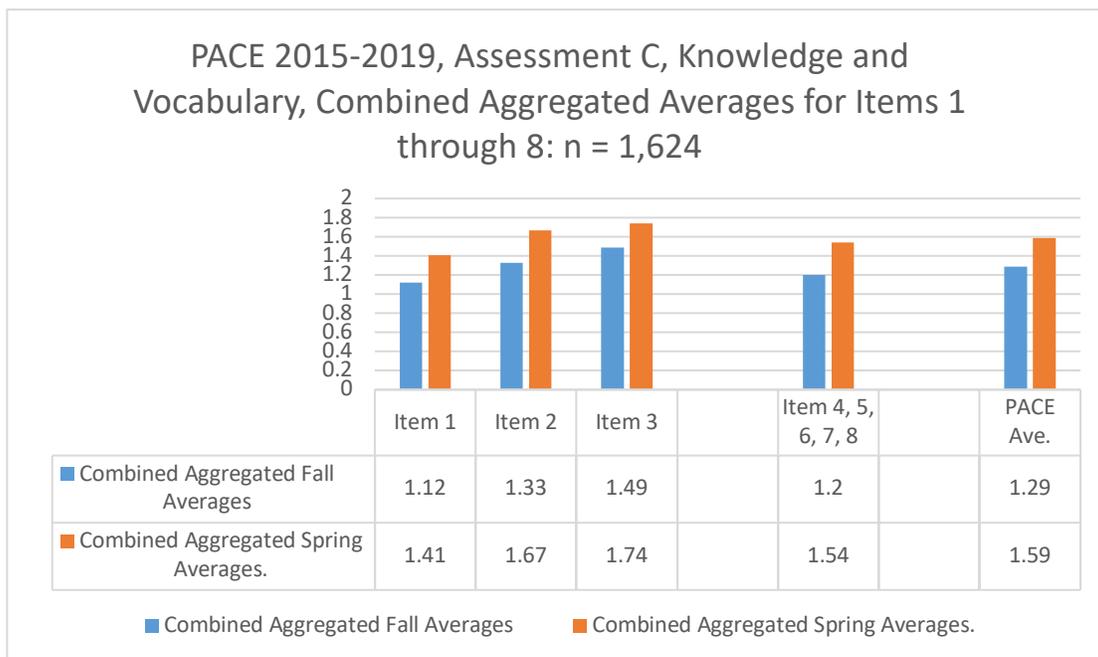
largest increase among all items on Assessment C, Knowledge and Vocabulary. With substantial annual increases over a four year period, it appears as if students in the PACE program are producing clear evidence of acquiring vocabulary being taught about the arts in all four disciplines included in the PACE program.



Comparisons of the fall and spring aggregated average scores across all items on the Assessment C: Knowledge and Vocabulary, instrument and from all assessments from participating schools for the period of 2015-2019 reveal that the fall aggregated average of 1.29 points for the instrument rose on the spring assessment to 1.59 points or .3 (19%). The largest increase was experienced for Item 2, Where could you go to see (art, dancers, music, theatre)? and the combined vocabulary items with an increase of .34 points (22%). This was followed by

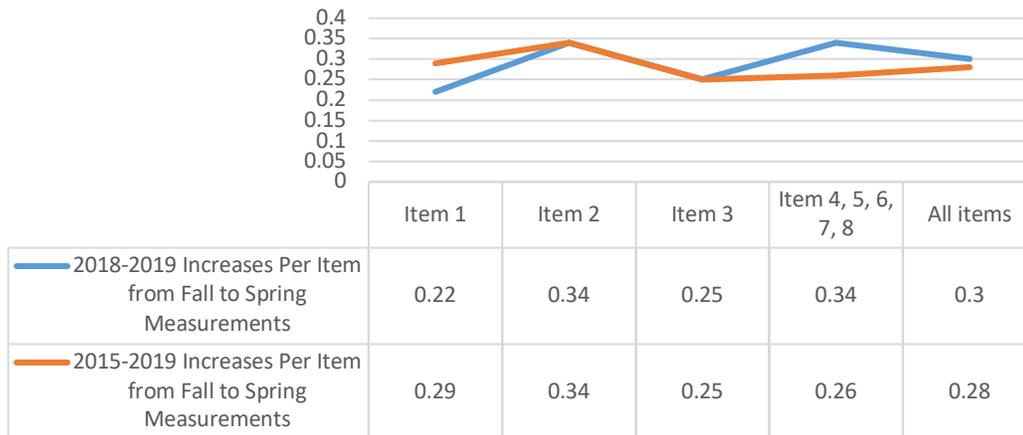
an increase of .29 points (21%) on Item 1, Describe some different kinds of (dance, art, music, theatre), an increase of .26 points (29%) on vocabulary Items 4, 5, 6, 7, 8 combined, and an increase of .25 points (15%) on Item 3, Do people (make art, dance, make music, act) just for enjoyment or can (making art, dancing, making music, or acting) also be a job to earn money?

For all items on this assessment a combined increase of .28 points (19%) was produced over the four year period of the program. Acceptable levels of positive growth were demonstrated by scores from all items on this assessment. Scores among all items remained stable for the period under study and demonstrate that PACE students are increasing their knowledge about the arts and their understanding of key vocabulary specific to learning in the arts.



PACE 2015-2019, Assessment C, Knowledge and Vocabulary, Fall to Spring Point Increases, All Items:

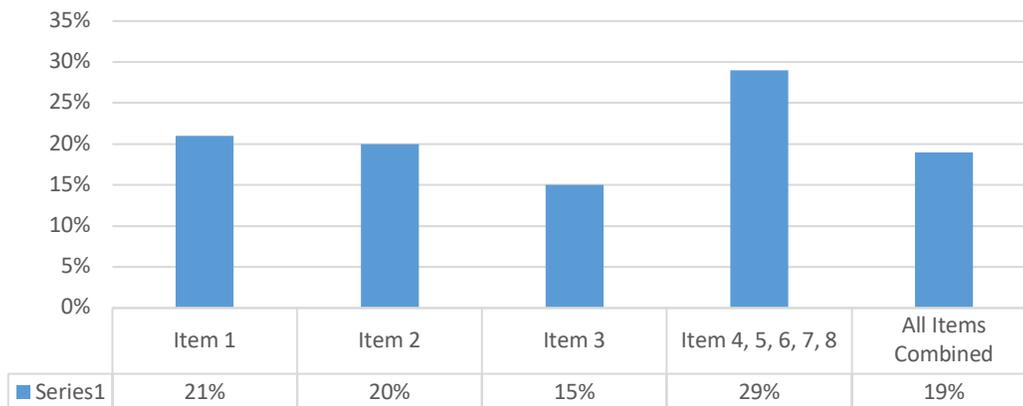
n = 1,624



— 2018-2019 Increases Per Item from Fall to Spring Measurements  
— 2015-2019 Increases Per Item from Fall to Spring Measurements

PACE 2015-2019, Assessment C, Knowledge and Vocabulary, Items 1-8 Combined, Percent of Spring Increase from Fall Aggregated Averages:

n = 1,624



## PACE Student Skills Report

Each of the arts include a variety of specific skills sets. Some skills are physical, cognitive, or non-cognitive. These skills will vary from arts discipline to arts discipline with some being common to all arts disciplines. On a foundational level, the arts employ a wide variety of physical skills. Some of these skills involve the uses of tools and materials, while others deal with kinesthetics and controlled movement. Some skills require fundamental understanding and development of the blending of physical and cognitive processes used in the arts (Eisner, 1998), while others are of a purely cognitive nature that are unique to the arts (Dorn, 1999; Efland, 2002; Hetland, Winner, Veenema, & Sheridan, 2007; Jensen, 2001) and deal with higher order thinking and problem solving skills. Still others require unique non-cognitive skills related to habits of mind (Costa & Kallick, 2008) such as persistence, tolerance of ambiguity, risk taking, managing impulsivity, empathy, creating, imagining, innovating, and other skills associated with awareness and reflection.

PACE programs included the teaching and learning of assorted arts skills. An instrument, *PACE Individual Student Skills Assessment*, with six items was developed to assess skill development among PACE students (See Appendix E). The first three items were replicated in all four disciplines and on discipline specific instruments used to measure students' skill knowledge for disciplines studied in the PACE program at their school. The first three items included the following:

Question 1: Basic level of demonstrated student skill in the arts discipline.

Question 2: Demonstration of effective application of practices, tools, or materials in the

creative process for the arts discipline.

Question 3: Understanding and application of the sequence/process for creating an activity or work in the arts discipline.

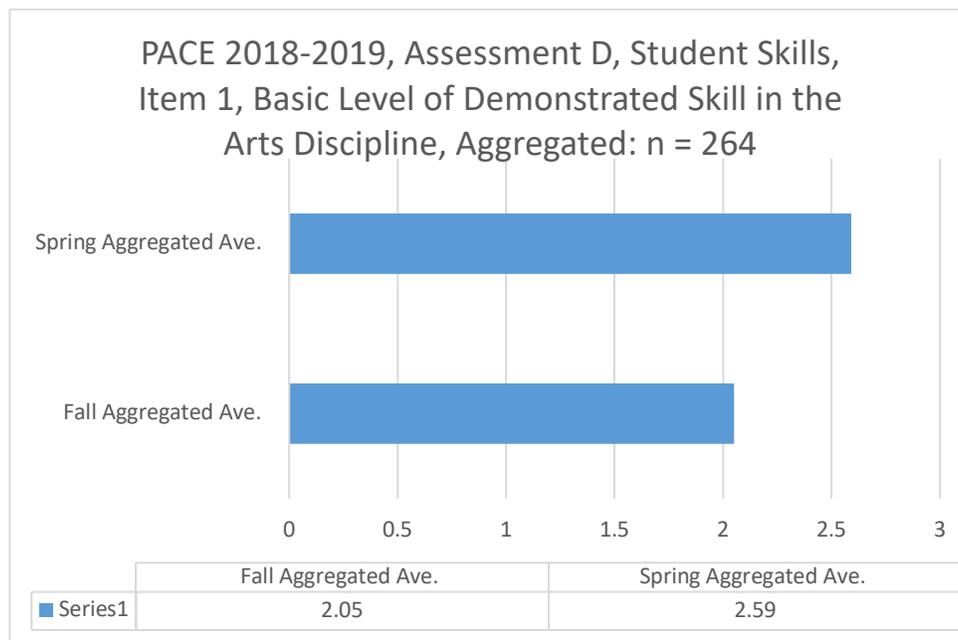
Three additional skills specific to the arts discipline at the individual PACE schools were determined independently by the teaching artists and arts teachers at the local PACE school. These skills varied among PACE sites, grade levels, and among arts disciplines. Assessment of students' individual skill development was done by the teaching artists and arts teachers at the PACE schools.

The assessment tool included a three-point scale for determining skill development. The scale consisted of a single point for "minimal" skill, two points for "developing" skill, and three points for "advanced" skills. The assessments were done during the fall semester and in the spring semester. A total of 264 students were assessed with this instrument during the 2018-2019 school year. The following report will provide separate aggregated findings based on the three identical items used in the three arts disciplines in the PACE program, including dance, theatre, music, and visual arts. The report also includes combined findings for students' arts skills as clustered within each of the arts disciplines and among schools focused on the same discipline. Summaries of findings will be reported separately for each of the arts disciplines (art, dance, music, theatre).

PACE students skills were assessed by arts educators and teaching artists using the *PACE Individual Student Skills Assessment* (See Appendix E). Students' basic level of demonstrated

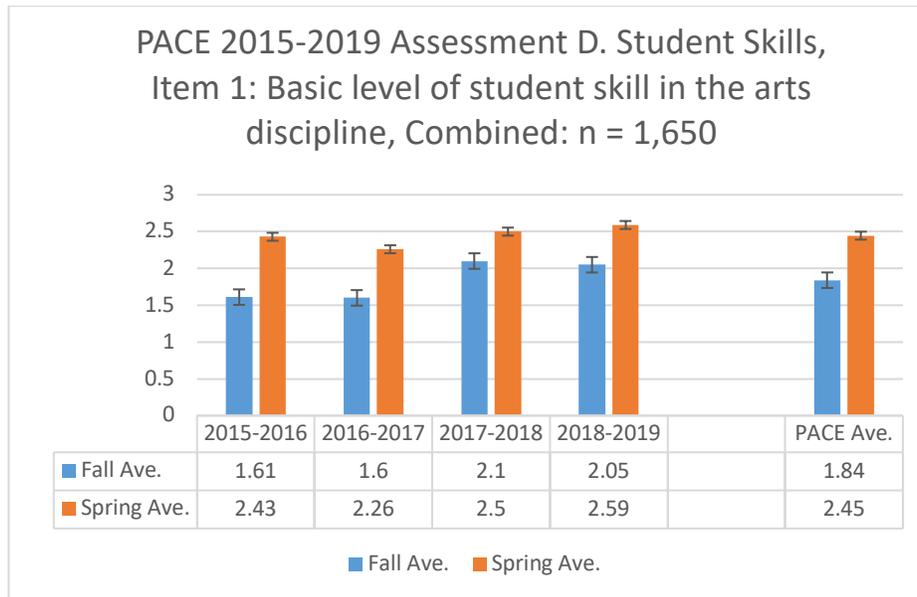
skill in the arts discipline was evaluated (Item 1). The fall aggregated average was 2.05. The range of scores was from 1.81 at Kendall Elementary School to 2.41 at South Wayne Elementary School. The aggregated spring average was 2.59. This is an increase of .54 points (21%) from the fall average for this item. The range of spring scores was from 2.39 at Kendall to 2.81 at South Wayne. The largest increase in demonstrated student skills in the arts discipline was at IPS School 51 with an increase of .61 points (25%) from the fall to spring assessments. Increases at other schools included Kendall (.58 or 24%), Van Buren (.55 or 21%), and South Wayne (.40 points or 14%).

All PACE schools produced fair to good increases for this item from the fall to spring assessments. All schools moved from the “developing” level toward the “advanced” level of performance for this item. This finding suggests that PACE students, as a group, are demonstrating better than a basic level of skills in their arts disciplines and have improved in their usage of discipline specific skills taught in the PACE program.



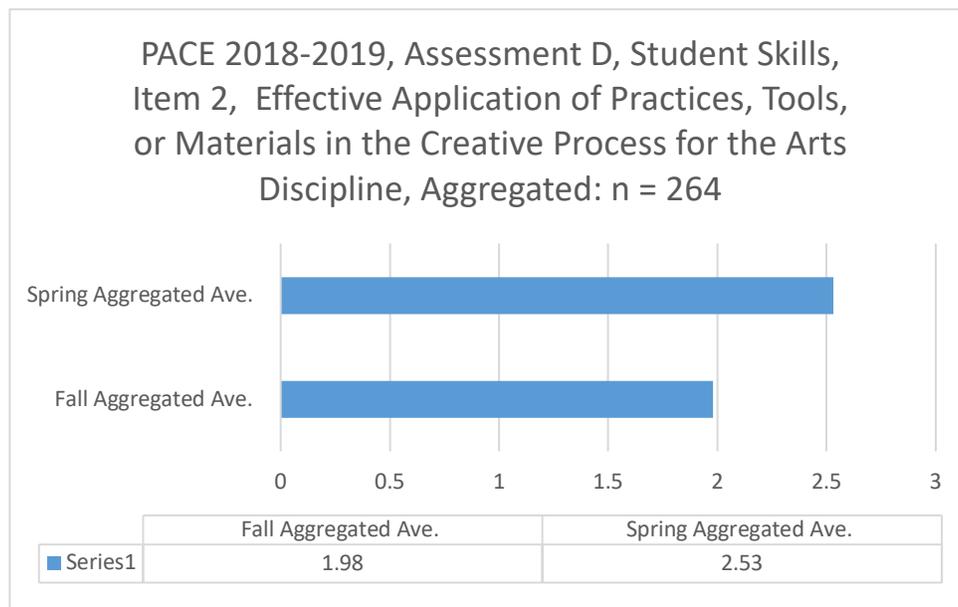
Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Skills, Item 1, Basic level of student skill in the art discipline, reveal that the aggregated fall and spring averages for this period increased from 1.84 to 2.45 respectively or an increase of .61 points (25%) over the duration of the study. A total of 1,650 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2018-2019 assessments produced a higher average for this item (2.05) than the 2016-2017 (1.60), 2015-2016 (1.61), and 2017-2018 assessments (2.1) and that fall average scores are experiencing modest increases each year over the four year period of the PACE program. Spring assessment averages over the duration of the study reveal that the 2018-2019 aggregated spring average was the highest with an aggregated average of 2.59 points followed by the 2017-2018 average of 2.5, the 2015-2016 spring average of 2.43 points and the 2016-

2017 average of 2.26. These averages produced an increase of .33 points (13%) across the four year period for this item.



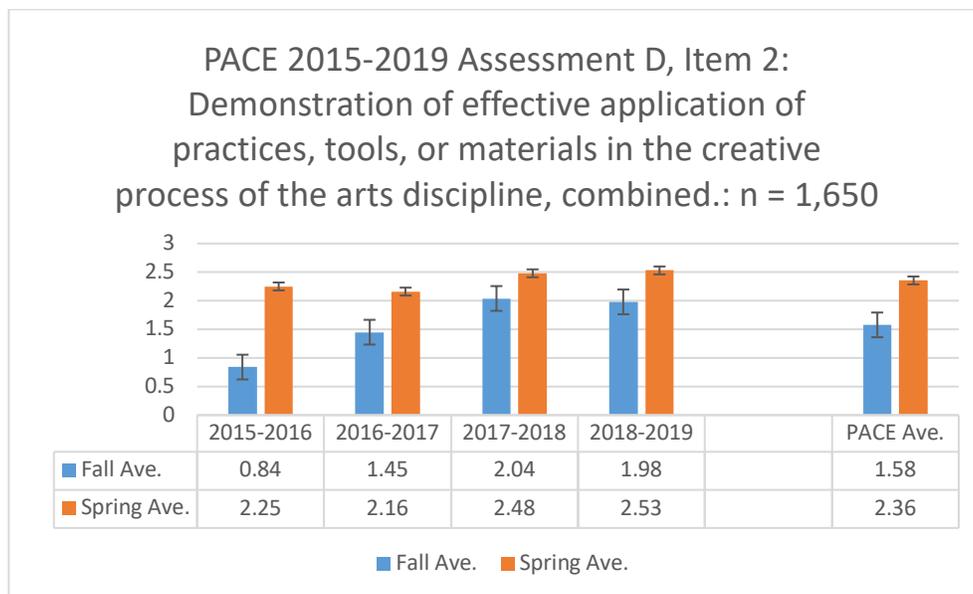
Students' demonstration of effective application of practices, tools, or materials in the creative process for the arts discipline being studied at their school (Item 2) was assessed. The aggregated fall average for all disciplines was 1.98. The range of scores was from 1.79 at Kendall Elementary School to 2.23 at South Wayne Elementary School. The aggregated spring average was 2.53. This is an increase of .55 points (22%) from the fall assessment for this item. The range of spring scores was from 2.36 at Kendall Elementary school to 2.71 at South Wayne. The largest increase in demonstrated student skills in the arts discipline from the fall to spring assessments was at Kendall Elementary School with an increase of .57 points or 24%. Increases at other schools included Van Buren with .61 points or 23%, IPS School 51 with .52 points or 22%, and South Wayne with .48 points or 18%.

All PACE schools produced increases for this item with good increases from the fall to spring assessments. All schools performed at the 2.0 or higher range for this item on the spring assessment indicating that students in the PACE program for 2018-2019 moved from “developing” level to “advanced” levels in applying skills for this item. This finding suggests that PACE students, as a group, are demonstrating better than a basic level of skills in the effective application of practices, tools, or materials in the creative process for the arts discipline in their school.



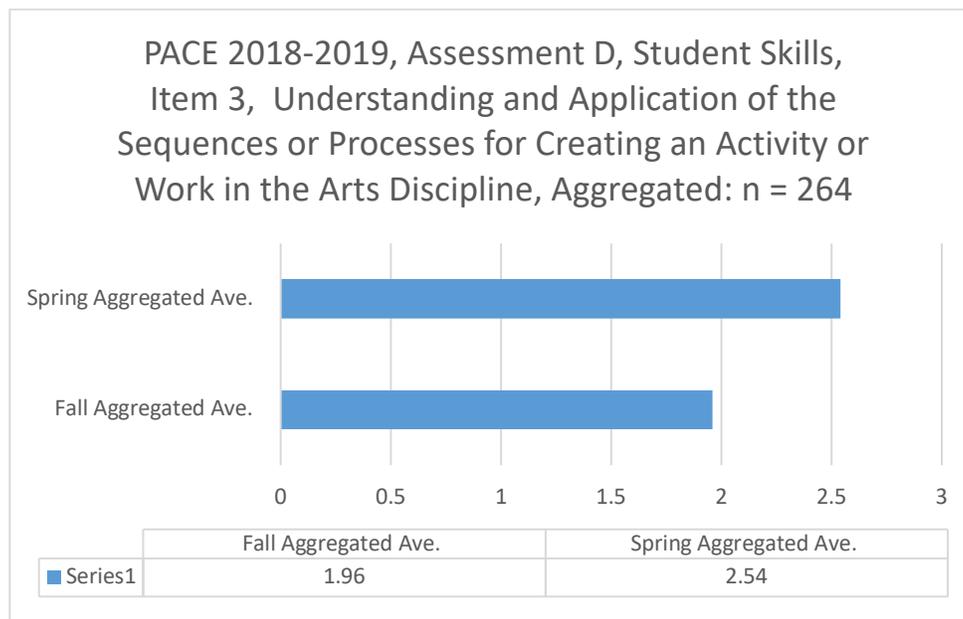
Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Skills, Item 2: Demonstration of effective application of practices, tools, or materials in the creative process of the arts discipline, reveal that the aggregated fall and spring averages for this period increased from 1.58 to 2.36 respectively or an increase of over three quarters of a full point (.78 points or 33%) over the duration of the study. A total of 1,650 students completed this item during this period. Comparisons of findings from this period reveal that the

aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (2.04) than the 2018-2019 assessments (1.98), the 2016-2017 assessments (1.45) and the 2015-2016 assessments (.84). PACE students improved their aggregated averages on fall assessments over the course of the study with an overall increase of 1.14 points over the four-year period. The highest spring assessment average was for 2018-2019 with 2.53 points followed by 2017-2018 with 2.48 points, the 2015-2016 spring average of 2.25 points, and the 2016-2017 average of 2.16 or an increase of .37 points (15%) on the spring assessments of this item over the four-year period. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making good annual improvements in their application of practices, tools, or materials in the creative process in their arts disciplines.



Students' understanding and application of the sequence or process for creating an activity or work in their arts discipline (Item 3) was assessed in 2018-2019. The aggregated fall average for all disciplines was 1.96. The range of scores was from 2.23 at South Wayne Elementary School to 1.79 at Kendall Elementary School. The aggregated spring average was 2.54. This is an increase of .58 points (23%) from the fall assessment for this item. The range of spring scores was from 2.69 at South Wayne to 2.39 at Kendall Elementary. The largest increase for demonstrated student skills in the arts discipline was at South Wayne Elementary School (.71 points or 27%), followed by increases at Kendall (.60 points or 25%), and increases at Van Buren Elementary (.58 points or 23%), and at IPS School 51 (.55 points or 23%).

Schools producing increases for this item experienced good increases from the fall to spring assessments. All schools performed at the 2.0 or higher range for this item on the spring assessment and were moving from the "developing" level to the "advanced" level for this item. This finding suggests that PACE students, as a group, are demonstrating better than a basic level of skills in understanding and applying the sequences or processes for creating an activity or work in the arts discipline in their school.

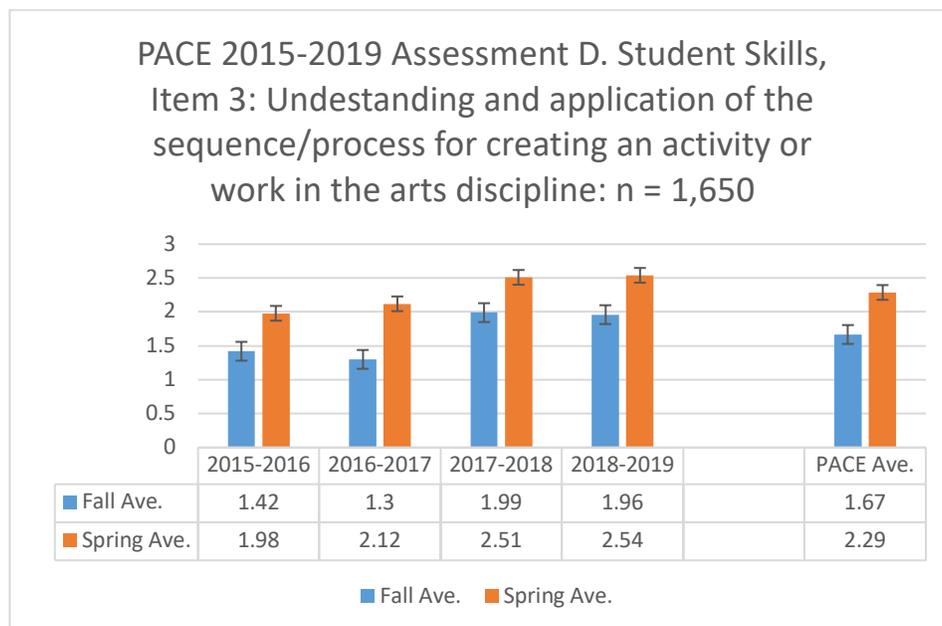


Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Skills, Item 3: Understanding and application of the sequences or processes for creating an activity or work in the arts discipline, reveal that the aggregated fall and spring averages for this period increased from 1.67 to 2.29 respectively or an increase of .62 points (27%) over the duration of the study. A total of 1,650 students completed this item during this period.

Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (1.99) than the 2018-2019 assessments (1.96), the 2015-2016 assessments (1.42), and the 2016-2017 assessments (1.30).

PACE students' annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of .56 points (35%) over the four-year period. The spring assessment average for 2018-2019 was the highest with 2.54 points followed by the 2017-2018 assessments with 2.51 points, the 2016-2017 spring average of 2.12 points, and the

2015-2016 average of 1.98 or an increase of .56 points on the spring assessments of this item over the four-year period. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making very good annual improvements in understanding and applying the sequences or processes for creating an activity or work in their arts discipline.



The remaining three items on *Assessment D, Student Skills* included assessments of site-specific and discipline-specific skills. Because of the distinctive nature of each of these skills and the variations of these skills within the arts disciplines, a cross cases comparison of findings for these items would not provide indications of how students performed within the arts discipline featured within their schools. Therefore, the following report will include reports of findings for

the three remaining Student Skills items as clustered within each of the arts disciplines (dance, music, theatre, and visual arts) in the PACE program.

### Dance Skills Findings

Dance was taught at South Wayne Elementary School with second and third grade students. A total of 101 students were taught dance in 2018-2019. On the first item of the Skills Assessment, teachers and artists in the PACE program evaluated students' basic levels of skill demonstrated in dance. The fall average for this item was 2.41 or "developing" on three points scale. The spring average for this item was 2.81 or an increase of .40 points (14%).

Item two addressed students' effective demonstration of practices, tools, or materials in the creative process of dance. The fall average for this item was 2.23 points or "developing". The spring average was 2.71 or an increase of .48 points (18%).

Item three focused on students' understanding and application of the sequence or processes of creating an activity or work in dance. The fall average for this item was 2.23 points or "developing". The spring average was 2.39 or an increase of .16 points (25%)

The remaining three dance skill items were school specific. Artists and teachers identified these skills for students' in their schools. The average for items four (2.85), five (2.61) and six (2.58) produced an aggregated average of 2.68. The combined average for all six items on the Dance Skills Assessment increased from 2.27 on the fall assessment to 2.68 on the spring assessment (.41 points or 15%), which is above the "developing" skill level for dance skills by

the end of the assessment. This statistic indicates a very good overall level of skill development within dance over the course of instruction.

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Table 3

*PACE Dance: Site Specific Student Skills 4, 5, and 6*

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School	Skills
Pine	<p>2015-2017</p> <p>4. Demonstrates understanding of shape in dance (holds 8 counts, uses a variety of levels, varies shapes).</p> <p>5. Demonstrates understanding of motion in dance (varies between locomotor and axial, varies direction, pathway and tempo).</p> <p>6. Demonstrates understanding of energy in dance (uses strong, light, free, bound, percussive and sustained energy).</p>
South Wayne	<p>2017-2018</p> <p>4. Demonstrates ability to follow directions.</p> <p>5. Demonstrates elements of dance.</p> <p>6. Demonstrates body awareness.</p> <p>2018-2019</p> <p>4. Demonstrates creativity in choices, critical thinking, and group work.</p> <p>5. Makes connections between poetry and literature to specified movement skills.</p>

	6. Understanding of personal energy and its effect on individual, partner, and group movement.
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### Music Skills Findings

Music was taught at Kendall Elementary School with second grade students. A total of 40 students were taught music in 2018-2019. 2018-2019 represent the first year of involvement by Kendall in music. On the first item of the Skills Assessment, teachers and artists in the PACE program evaluated students' basic levels of skill demonstrated in music. The fall average for this item was 1.81 or "developing" on three points scale. The spring average for this item was 2.39 or an increase of .58 points (24%).

Item two addressed students' effective demonstration of practices, tools, or materials in the creative process of music. The fall average for this item was 1.79 points or "developing". The spring average was 2.36 or an increase of .57 points (24%).

Item three focused on students' understanding and application of the sequence or processes of creating an activity or work in music. The fall average for this item was 1.79 points or "developing". The spring average was 2.39 or an increase of .6 points (25%)

The remaining three music skill items were school specific. Artists and teachers identified these skills for students' in their schools. The spring average for items four (2.48), five (2.33) and six (2.48) produced an aggregated average of 2.43. The combined average for all six items on the Music Skills Assessment increased from 1.84 points on the fall assessment to 2.41 on the spring assessment (.57 points or 24%), which is slightly above the "developing" skill level for music skills by the end of the assessment. This statistic indicates a very good overall improvement and level of skill development from the fall to spring assessment within music education.

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Table 4

*PACE Music: Site Specific Student Skills 4, 5, and 6*

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School	Skills
Kendall	2018-2019  4. Participation in the music and following directions  5. Demonstration of maintaining a steady beat.  6. Paying attention during each segment

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## Theatre Skills Findings

Theatre was taught at Indianapolis Public Schools, School 51 during the 2018-2019 academic year. A total of 50 students were taught theatre. On the first item of the Skills Assessment, teachers and artists in the PACE program evaluated students' basic levels of skill demonstrated in theatre. The fall average for this item was 1.85. The spring average was 2.46 or an increase of .61 points (25%).

Item two addressed students' effective demonstration of practices, tools, or materials in the creative process of theater. The fall average for this item was 1.86 points. The spring average for this item was 2.38 or an increase of .52 points (22%).

Item three focused on students' understanding and application of the sequence or processes of creating an activity or work in theatre. The fall average for this item was 1.86 points. The spring average was 2.41 or an increase of .55 points (23%).

The remaining three theatre skill items were school specific. Artists and teachers identified these skills for students' in their schools. The spring averages for items four (2.41), five (2.0) and six (2.29) produced an average for these three items of 2.24. Item Six, Stage Voice (Speaking lines loudly and clearly without shouting) produced the highest spring average of 2.69 among all six assessment items for theatre. The combined average of all six items on the Theatre Skills Assessment was 2.19 which indicates a "developing" level of skill development within theater education.

Table 5

*PACE Theatre: Site Specific Skills 4, 5, and 6*

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School	Skills
McKinley	<p>2015-2017</p> <p>4. Demonstrates ability to work well in a group (ensemble building).</p> <p>5. Uses appropriate expressions (e.g. sad when sad, happy when happy, etc.</p> <p>6. Articulates feelings/thoughts about the lesson.</p>
Indianapolis Public Schools, School 51	<p>2018-2019</p> <p>4. Actor Neutrality (ability to quickly and quietly get into position and wait direction.</p> <p>5. Stage Directions (knowledge and ability to go stage right, stage left, upstage, downstage, and combinations like up-right, down-center, down-left)</p> <p>6. Stage Voice (Speaking lines loudly and clearly without shouting)</p>

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## Visual Arts Skills Findings

Visual Arts was taught at Van Buren Elementary School with second and third grade students. A total of 74 students were taught visual arts. On the first item of the Skills Assessment, art teachers and teaching artists in the PACE program evaluated students' basic levels of skill demonstrated in visual arts. The fall visual arts average for this item was 2.13. The spring average was 2.68 or an increase of .55 points (21%).

Item two addressed students' effective demonstration of practices, tools, or materials in the creative process of visual arts. The fall average for this item was 2.06 points. The spring average was 2.67 or an increase of .61 points (23%).

Item three focused on students' understanding and application of the sequence or processes of creating an activity or work in visual arts. The fall average for this item was 1.98 points. This spring average was 2.67 or an increase of .69 points (26%). This average is approaching the "advanced" skill level of performance.

The remaining three visual arts skill items were school specific. Teaching artists and art teachers identified these skills for students' in their schools. The spring averages for items four (2.53), five (2.49) and six (2.46) produced a combined average of 2.16. Item six produced the lowest average (2.46) among all items on the Visual Arts Skills Assessment. The aggregated average for all six items on the Visual Arts Skills Assessment was 2.58, which is approaching the "advanced" skill level of performance for visual arts skills by the end of the assessment.

Table 6

*PACE Visual Arts: Site Specific Skills 4, 5, 6*

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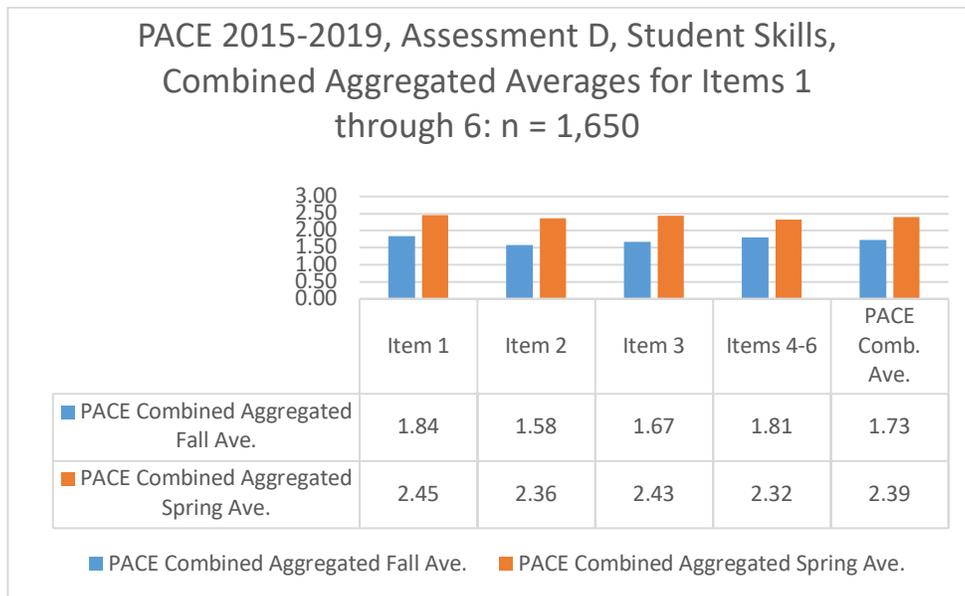
School	Skills
Meadows	<p>2015-2017</p> <p>4. Create thoughtful drawings and purposeful projects from presented information and instruction.</p> <p>5. Creativity: Use of original ideas and self-expression.</p> <p>6. Self-Critique: Able to look with a critical eye at project; to assess good/bad; changes are purposeful.</p>
Van Buren	<p>2017-2019</p> <p><u>1<sup>st</sup> Grade Visual Arts Skills</u></p> <p>4. Students will be able to comprehend the process of the art project as described by the artist</p> <p>5. Students will be able to use the materials supplied by the artist for the project in a creative way.</p> <p>6. Students will be able to keep all materials in an organized fashion to better use in the completion of their project.</p>

	<p><u>2<sup>nd</sup> Grade Visual Arts Skills</u></p> <p>4. Students will be able to comprehend what the art project is about as described by the artist, with the ability to verbally interact with the artist as they go through the process.</p> <p>5. Students will be able to use instruction and materials to create – with a focused parameter- and explain their own “take” (creativity) on their project.</p> <p>6. Students will be able to keep materials in an organized fashion to better use in the completion of their projects. Second graders will be able to use thoughts, ideas and plans to better use and complete their project.</p>
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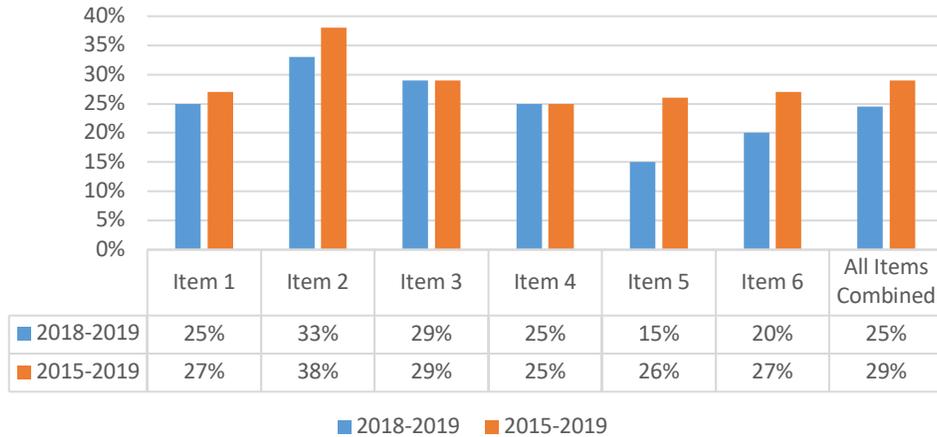
Comparisons of 2015-2016 through 2018-2019 data from all arts disciplines (dance, music, theatre, and visual arts) and for items four through six was conducted in order to identify how these skills items performed as a combined group in the PACE program. Student performances across all disciplines and grade levels for these items produced a combined aggregated fall average of 1.81 and a combined aggregated spring average of 2.35 or an increase across all disciplines of .54 points (23%) for the four-year period of the study.



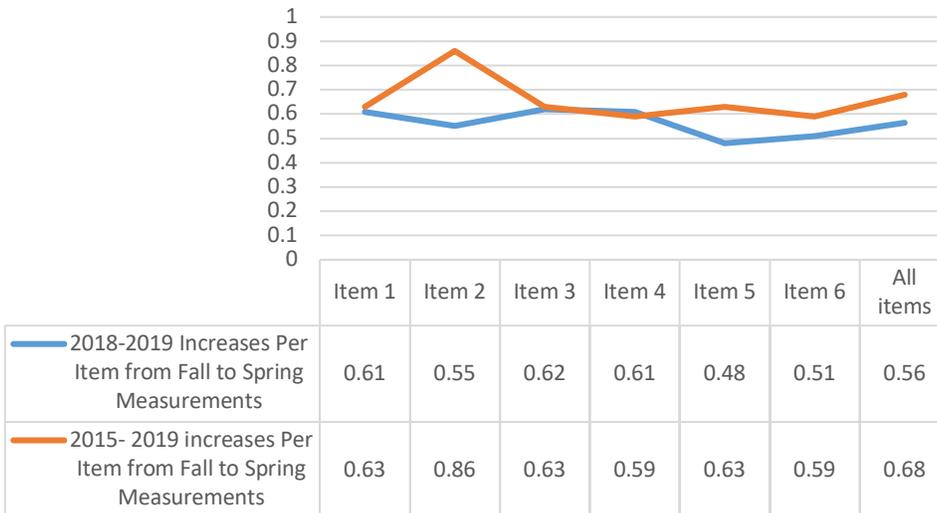
creating an activity or work in the art discipline (.63 points or 29%), Item 1, Basic level of student skill in the arts discipline (.63 or 25%), and for the combined Items four through six (.51 points or 22%) including improvements on Item 4 of .59 points (25%), on Item 6 of .59 points (20%), and on Item 5 of .63 points (15%). These findings demonstrate that PACE students are increasing their skills development over the period of the study for all skills assessed and within each of the arts disciplines in the PACE program.

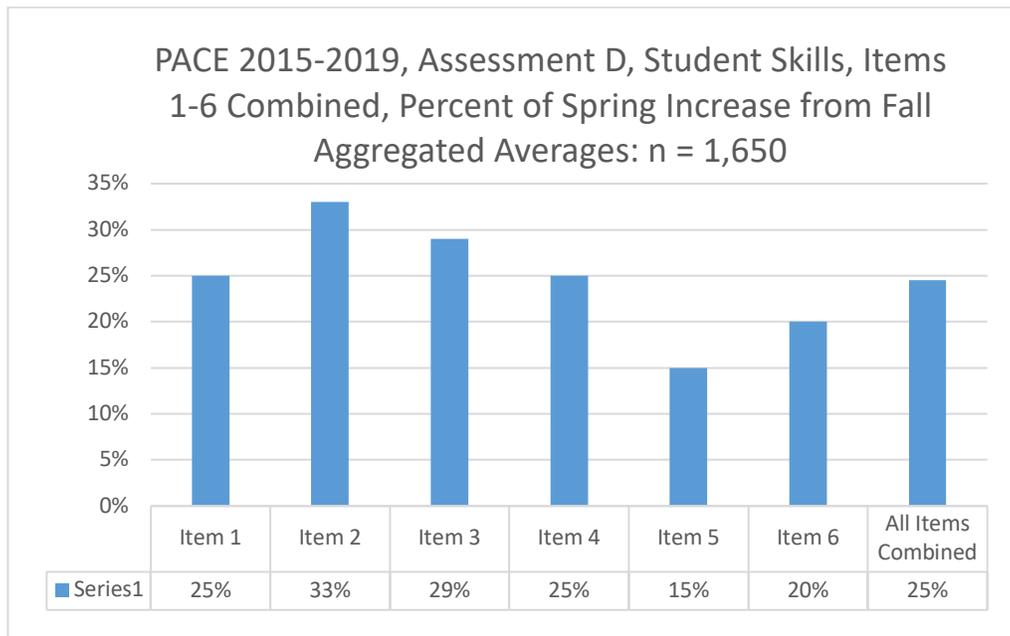


PACE 2015-2019, Assessment D, Student Skills, Items 1-6 Combined, Percent of Spring Increase from Fall Aggregated Averages: n = 1,650



PACE 2015-2019, Assessment D, Student Skills, Fall to Spring Point Increases, All Items: n = 1,650





## PACE Student Writing Samples Report

The arts play a major role in literacy development. Literacy can be broadly defined as the ability to read and write proficiently (Danko-McGhee & Slutsky, 2007). Danko-McGhee and Slutsky (2007), Drake (1998), Klein and Stuart (2013), and McDonald (2010) contend that literacy development is significantly increased when the arts are integrated into learning experiences. Danko-McGhee and Slutsky (2007) suggest that: “For all children, at all ability levels, the arts play a central role in cognitive, motor, language, and social-emotional development.” (p. 3). Malaguzzi (1998) suggests that when children come to understand that putting their ideas into graphic form enables them to communicate in a form that is much simpler than words, such understanding encourages children to begin the process of literacy development. Richards (1988) contends that the arts are the heart and soul of high quality

learning experiences, particularly in reading. Klein and Stuart (2013) suggest that integrating literacy and arts content in curriculum enhances learning in literacy as well as in the arts.

In the strictest sense, writing may be thought of as a visual art form. Writing is dependent upon using symbols and collections of symbols to represent words which are then strung together to communicate thoughts and ideas commonly called writing. The creative processes of making connections, questioning, visualizing, inferring, determining importance, and synthesizing used in the arts contribute to developing comprehension strategies employed in writing (Klein & Stuart, 2013). Sabol (2001) reported that students in arts programs learn about the arts more deeply and fully when asked to read or write about art. They are able to make connections among disparate fields of knowledge through connections they make between learning in the arts and other disciplines. Sabol (2001, 2014) also suggests that when arts educators included reading and writing about the arts in their curriculum, students performed better on the NAEP arts assessment and other state and national standardized tests.

The PACE program includes writing as a central focus for learning in the arts. Students in the PACE program were asked to provide writing samples about what they had learned through engagement with the art form chosen for their school's PACE program. Teachers were provided with a list of possible writing prompts or guiding questions (See Appendix F. 1.) that could be used to elicit students' written responses about their arts learning. PACE schools were given the opportunity to create school specific prompts for creating student writing samples. The list of writing prompts used by PACE schools follows (See Table 7):

Table 7

*2015-2019 PACE Site Specific Writing Prompts*

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School	Writing Prompt
<p>Pine, Dance ARTS FOR LEARNING</p>	<p>2015-2017</p> <p>1. Fall writing prompt:</p> <p>Please describe the last scene you created in dance using as much dance vocabulary as possible.</p> <p>2a. Spring writing prompt, Fourth Grade:</p> <p>Please describe the last dance you/we created using as much detail and dance vocabulary as possible. What was easy? What was difficult? What did you like? What did you not like?</p> <p>2b. Spring writing prompt, Fifth Grade:</p> <p>Please describe the dance you are creating using as much detail and dance vocabulary as possible. What did you notice while creating it? How do you feel about it?</p>
<p>South Wayne, Dance FORT WAYNE DANCE COLLECTIVE</p>	<p>2016-2018</p> <p>Fall Writing Prompt:</p> <p>First grade - Class A: Did you enjoy the activity?</p> <p>First grade - Class B: What did you learn in dance class?</p> <p>Second Grade - Class C: Did you enjoy the activity?</p>

	<p>Second Grade - Class D: What did you learn in dance class?</p> <p>Spring Writing Prompt:</p> <p>First grade - Class A: Did you enjoy the activity?</p> <p>First grade - Class B: What did you learn in dance class?</p> <p>Second Grade - Class C: Did you enjoy the activity?</p> <p>Second Grade - Class D: What did you learn in dance class?</p> <p>2018-2019</p> <p>Second and Third grade Prompts Used in Both Grades</p> <p>Do you like to dance alone or in a group? Why?</p> <p>Describe a dance activity you did this semester that was your favorite and why?</p>
Kendall, Music	<p>2018-2019</p> <p>Fall Writing Prompt:</p> <p>What did you learn in music session today?</p> <p>Spring Writing Prompt:</p> <p>What do you like most about music?</p>
McKinley, Theatre ROBINSON COMMUNITY LEARNING CENTER	<p>2015-2017</p> <p>Fall Writing Prompt:</p> <p>Write a letter to the Grasshopper on behalf of the Ant Queen based on topics brought up in the Ant Council outlining the terms of his stay with the Ants using vocabulary words, first person descriptive narrative, and persuasive writing.</p>

	<p>Spring Writing Prompt:</p> <p>Write Casey and Simon a thank you letter describing what important lessons you will take from their adventures.</p>
Indianapolis Public Schools, School 51, Theatre	<p>2018-2019</p> <p>Fall writing Prompt:</p> <p>Do you like being in a play? Why? Why not?</p> <p>Spring Writing Prompt:</p> <p>What are some of the ways you do your best as an actor?</p>
Meadows, Visual Arts INDIANA STATE UNIVERSITY COMMUNITY SCHOOL OF THE ARTS	<p>2015-2017</p> <p>Fall writing prompt:</p> <p>1st grade: Did you enjoy making the mouse color wheel? Why or why not? What did you learn?</p> <p>2nd grade: Did you enjoy making the cityscape? Why or why not? What did you learn?</p> <p>3rd grade: Did you enjoy making the Kandinsky lesson? Why or why not? What did you learn?</p> <p>Spring writing prompt:</p> <p>1st grade: Would you like to do the "Armadillo Ray" activity again? Why or why not? What did you learn?</p> <p>2nd grade: Tell me the difference between a cityscape and a landscape. What is the same? What is different?</p> <p>3rd grade: What did you learn about the story quilts and how to make them? Did you like it? Why or why not?</p>
Van Buren, Visual Arts BROWN COUNTY ART GUILD	2016-2019

	<p>Fall and Spring writing prompts for both first and second grade classrooms:</p> <p>Question 1: Describe what you made or did during the activity.</p> <p>Question 2: If you did the same activity again, what would you change? Why?</p> <p>Question 3: What did you learn from this activity?</p>
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PACE schools also were provided a rubric through which student writing samples could be evaluated (See Appendix F. E.2.). The rubric included three broad categories of criteria for evaluating student writing. These categories included: (1.) Ideas and Content, which included three criteria for evaluating student responses, (2.) Organization which provided two criteria, and (3.) Writing Conventions with a single criterion. Specific identified criteria examined in students' writing samples included the following:

1. Ideas and Content:

Criterion 1: Utilizes arts vocabulary;

Criterion 2: Demonstrates understanding of arts activity;

Criterion 3: Includes creative, unique, and/or new thoughts and ideas.

2. Organization:

Criterion 4: Expresses ideas in complete sentences;

Criterion 5: Has beginning, middle, and end.

### 3. Writing Conventions:

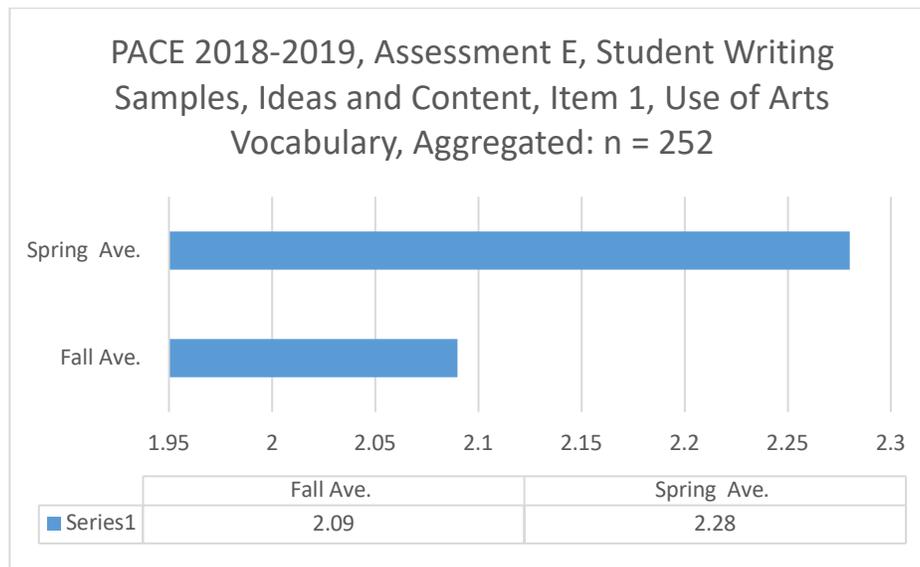
Criterion 6: Applies proper grammar, punctuation, spelling, and capitalization.

Assessment of student writing was done during the fall and spring of the academic year. A four-point rating scale was used to score student responses. Summaries of composite findings for the three disciplines in the PACE program, including dance, theatre, and visual arts will follow.

PACE 2018-2019 students' arts writing skills were assessed by arts educators and teaching artists using the *PACE Student Writing Sample Assessment*. A total of 252 students completed this assessment. Students' use of arts vocabulary from the arts discipline was evaluated (Item 1). The aggregated fall average for all disciplines was 2.09. The range of scores was from 2.53 for South Wayne to 1.70 for Van Buren. The aggregated spring average was 2.28. This is an increase of .19 points (9%) from the fall assessment for this item. The range of spring scores was from 2.80 at South Wayne to 1.89 at IPS School 51. The largest increase in students' use of arts vocabulary was at Van Buren (visual arts) with an increase of .38 points followed by increases at South Wayne (dance) with an increase of .27 points, and Kendall (music) with an increase of .08 points. No change for Item 1 was produced at IPS School 51 (theatre) from the fall to spring assessments. Both assessments produced an average of 1.89 points.

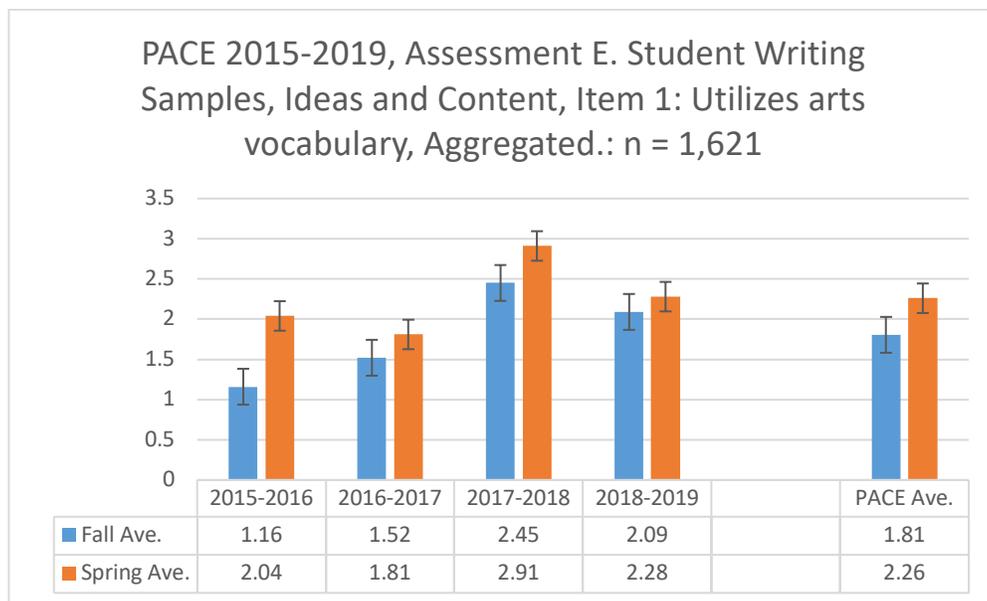
Schools producing increases for this item experiencing good increases from the fall to spring assessments. Two schools performed at the 2.0 or higher range for this item on both the fall and spring assessments. Findings for this item suggests that PACE students, as a group, are

performing at the “average” skills level in utilizing arts vocabulary in writing samples within their disciplines and are at acceptable levels.



Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Item 1: Utilizes arts vocabulary, reveal that the aggregated fall and spring averages for this period increased from 1.81 to 2.26 respectively or an increase of .45 points (20%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (2.45) than 2018-2019 assessments (2.09), the 2016-2017 assessments (1.52), and the 2015-2016 assessments (1.16). PACE students’ annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of .71 points (53%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 2.91

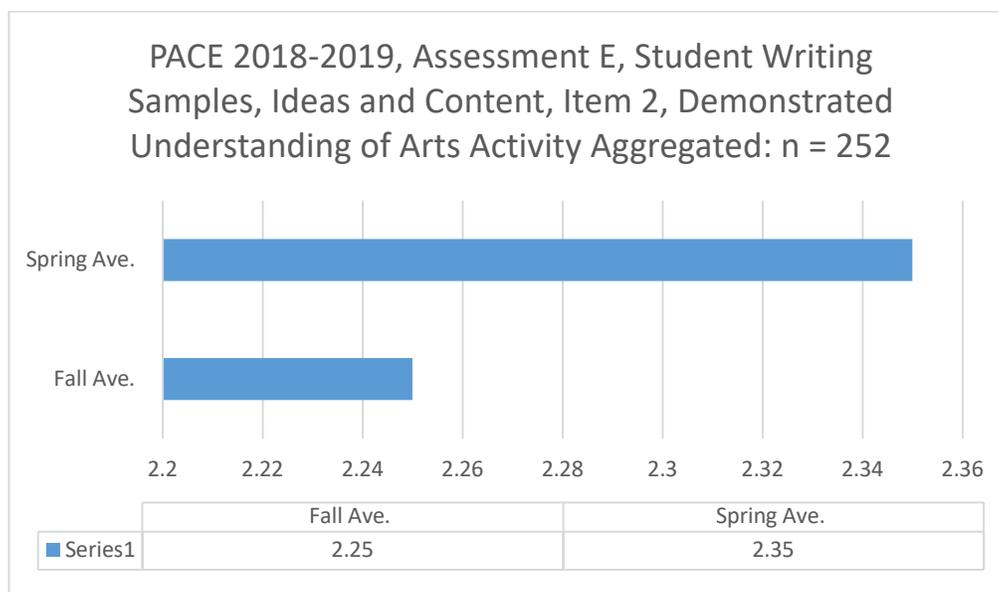
points followed by the 2018-2019 average of 2.28 points, the 2015-2016 spring average of 2.04 points and the 2016-2017 average of 1.81 or an increase of 1.10 points (38%) on the spring assessments of this item over the four-year period. This represents a substantial increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making good annual improvements in using arts vocabulary in their writing about arts experiences.



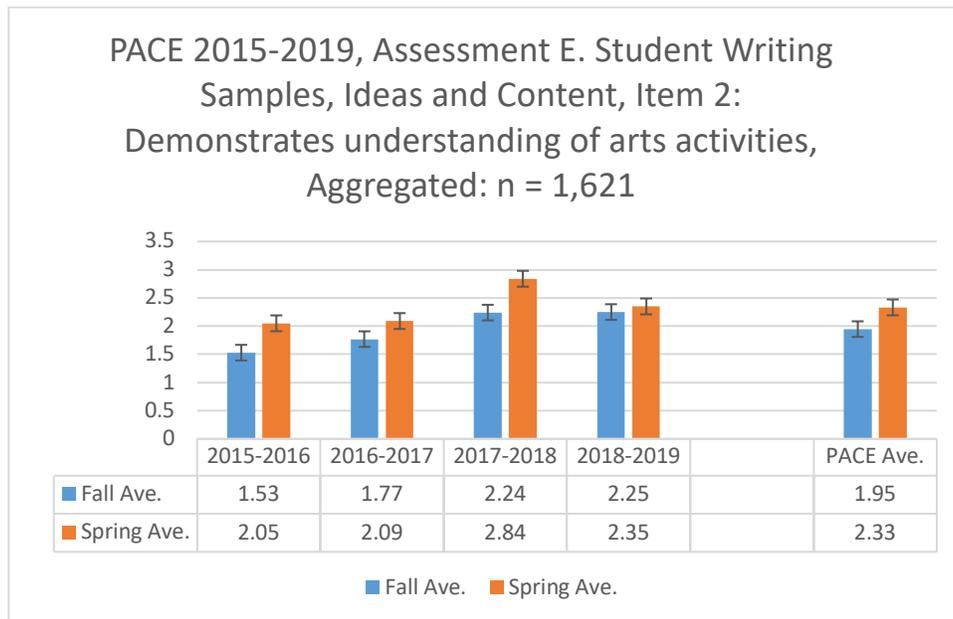
PACE 2018-2019 students' arts writing skills focusing on their descriptions of their understanding of arts activities was evaluated (Item 2). A total of 252 students completed this item. The aggregated fall average for all disciplines was 2.25. The range of scores was from 2.75 at South Wayne to 1.86 at IPS, School 51. The aggregated spring average was 2.35. This is an increase of .10 points (5%) from the fall assessment for this item. The range of spring scores was from 2.93 at South Wayne to 1.92 at IPS, School 51. The largest increase in students'

understanding of arts activities was at South Wayne with an increase of .18 points followed by increases at IPS, School 51 (.10), and Kendall and Van Buren (.09 each). Although spring averages were in the acceptable range, increases at all schools for this item were at lower levels than for all other items on the Student Writing Skills instrument.

All schools produced low levels of increases from the fall to spring assessments for this item. All schools performed at or near the 2.0 for this item on both the fall and spring assessments. Students are at the “average” level in developing their skills as measured by this item. Findings for this item suggest that students, as a group, are demonstrating acceptable levels of ability in learning to write about their understanding of the arts activities for the disciplines in which they are engaged.



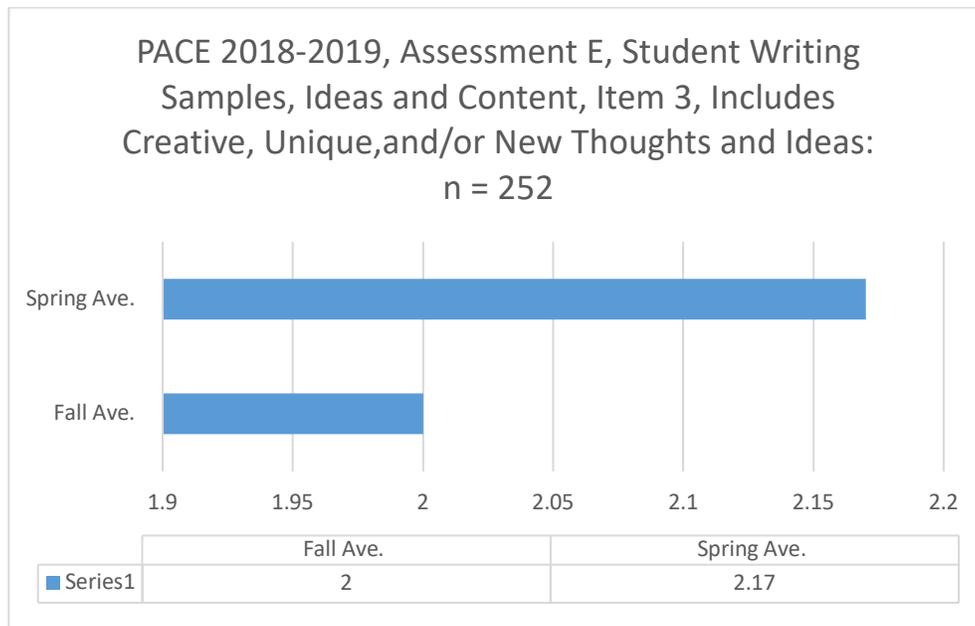
Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Item 2: Demonstrates understanding of the arts activity reveal that the aggregated fall and spring averages for this period increased from 1.95 to 2.33 respectively or an increase of .38 points (16%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2018-2019 assessments produced a higher average for this item (2.25) that from the 2017-2018 assessments (2.24), the 2016-2017 assessments (1.77), and the 2015-2016 assessments (1.10). PACE students' annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of .72 points (32%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 2.84 points followed by the 2018-2019 spring average of 2.35, the 2016-2017 spring average of 2.09 points and the 2015-2016 average of 2.05 or an increase of .79 points (28%) on the spring assessments of this item over the four-year period. This represents a substantial increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making good annual improvements in demonstrating their understanding of the arts activities in which they are engaged.



PACE 2018-2019 students' arts writing skills focusing on their inclusion of creative, unique, and/or new thoughts and ideas was evaluated next (Item 3). A total of 252 students completed this item. The aggregated fall average for all disciplines was 2.0. The range of scores was from 2.22 at South Wayne to 1.81 at IPS, School 51. The aggregated spring average was 2.17. This is an increase of .17 points (8%) from the fall assessment for this item. The range of spring scores was from 2.60 at South Wayne to 1.95 at Kendall. The largest increase in students' fall to spring demonstrated writing ability for this item was at South Wayne with an increase of .38 points, followed by increases at IPS, School 51 (.20), and Van Buren (.10). Kendal was the single school that produced a slight decrease (-.02) from the fall to spring assessments.

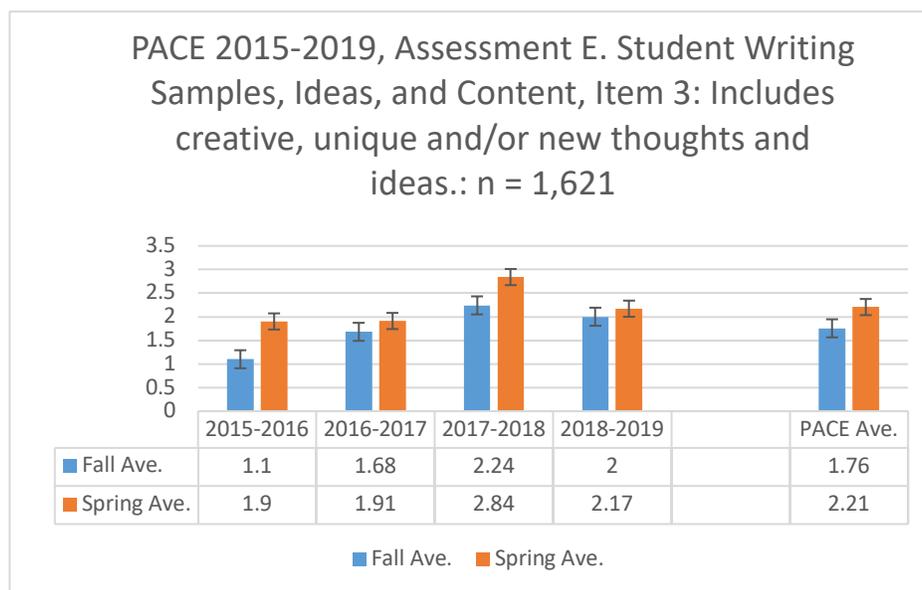
Schools producing increases for this item experienced modest to good increases from the fall to spring assessments. All schools performed at or near the 2.0 level for this item on

both the fall and spring assessments. Findings for this item suggest that PACE students, as a group, are demonstrating modest growth in their ability to include creative, unique, and/or new thoughts and ideas about their experiences in the art forms in which they are engaged.



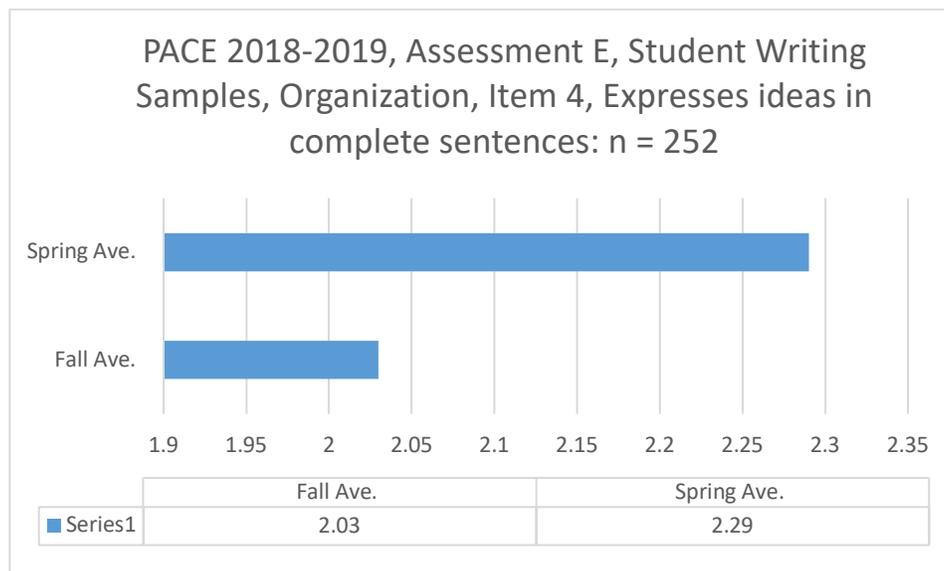
Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Item 3: Includes creative, unique, and/or new thoughts and ideas reveal that the aggregated fall and spring averages for this period increased from 1.76 to 2.21 respectively or an increase of .45 points (21%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (2.24) than the 2018-2019 fall assessment (2.0), the 2016-2017 assessments (1.68), and the 2015-2016 (1.10) assessments. PACE students' annually improved

their aggregated averages on fall assessments over the course of the study with an overall fall increase of 1.14 points (51%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 2.84 points followed by the 2018-2019 spring average of 2.17 points, the 2016-2017 spring average of 1.91 points, and the 2015-2016 average of 1.90 points or an increase of .94 points (34%) on the spring assessments of this item over the four year period. This represents a substantial increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making good annual improvements for including creative, unique, and/or new thoughts and ideas in their writing about the arts discipline in which they are engaged.



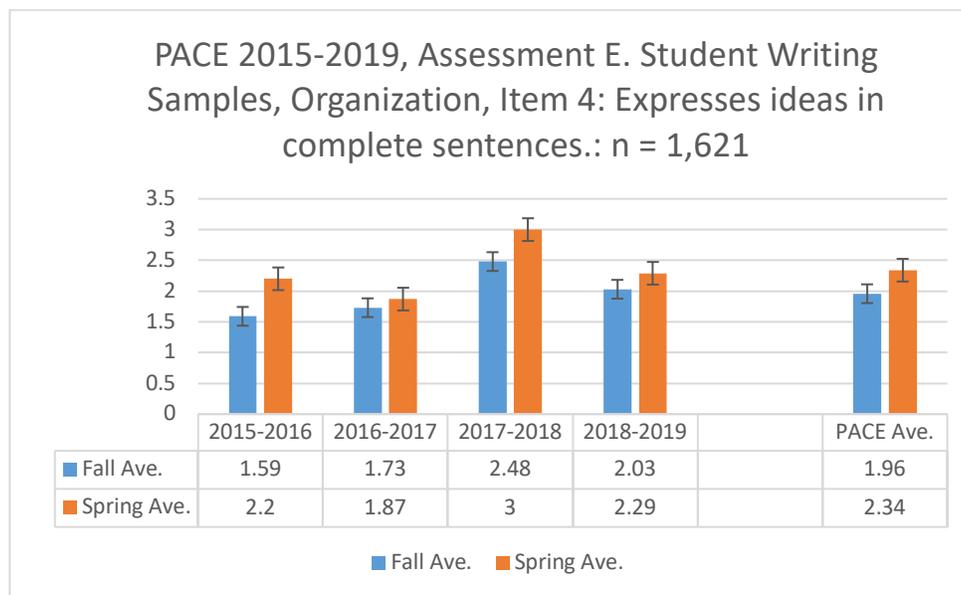
Assessment of 2018-2019 PACE students' writing skills included criteria focused on the measurement of students' organization of their written responses on writing prompts. Item 4, dealt with the expression of ideas in complete sentences. A total of 252 students completed this item. The aggregated fall average for all disciplines was 2.29. The range of scores was from 2.66 at South Wayne Elementary School to 1.44 at IPS School 51. The aggregated spring average was 2.29. This is an increase of .26 points (14%) from the fall assessment for this item. The range of spring scores was from 2.86 at South Wayne to 1.98 at IPS, School 51. The largest increase in students' fall to spring demonstrated writing ability for this item was at IPS, School 51 (.54), followed by increases at Van Buren (.26), South Wayne (.20), and Kendall (.16).

Schools producing increases for this item experiencing modest to good increases from the fall to spring assessments. All schools performed at the 2.0 or higher range for this item on both the spring assessments. Findings for this item suggests that PACE students, as a group, are demonstrating good levels of ability in expressing their ideas in complete sentences about the art form in which they are engaged.



Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Item 4: Expresses ideas in complete sentences reveal that the aggregated fall and spring averages for this period increased from 1.96 to 2.34 respectively or an increase of .38 points (16%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (2.48) than the 2018-2019 assessments (2.03), the 2016-2017 assessments (1.73) and the 2015-2016 (1.59) assessments. PACE students' annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of .89 points (36%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 3.00 points followed by the 2018-2019 spring average of 2.29 points, the 2015-2016 spring average of 2.20 points, and the 2016-2017 average of 1.87 points or an increase of 1.13 points (38%) on

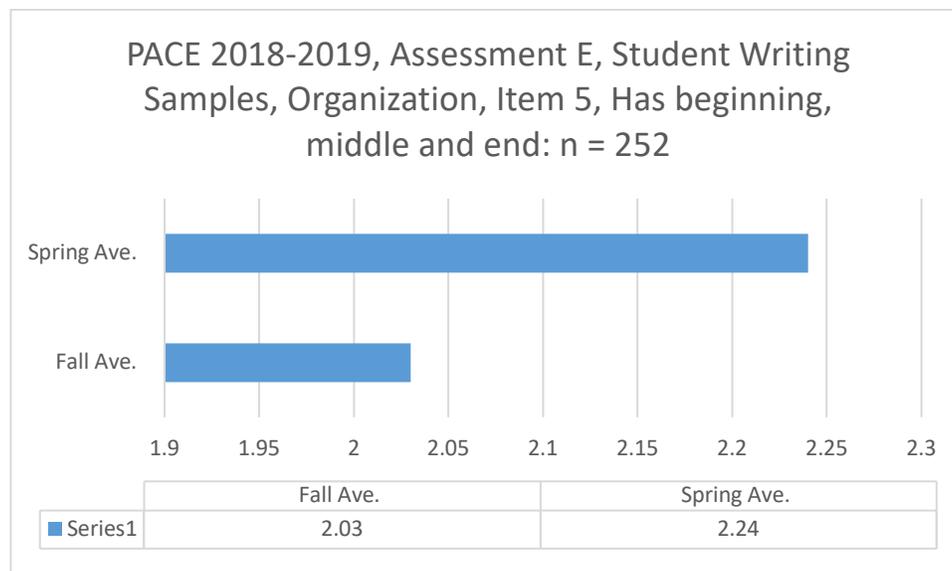
the spring assessments of this item over the four-year period. This represents a substantial increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making very good annual improvements in expressing their ideas in complete sentences about arts activities and learning in which they are engaged.



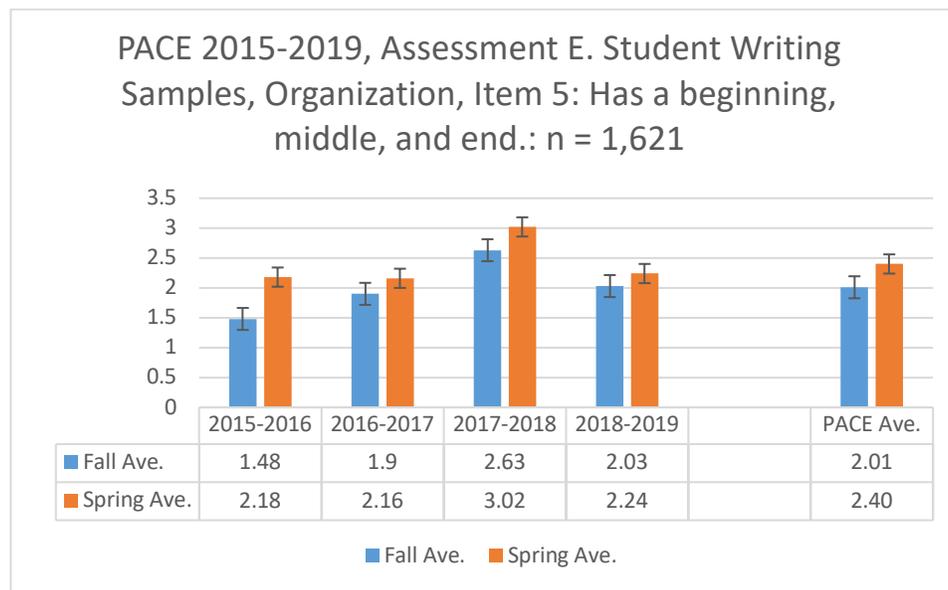
Assessment of 2018-2019 PACE students' writing skills included an item focused on the measurement of students' organization of their written responses on writing prompts. Item 5, focused on students' writing and the degrees to which it had a beginning, middle, and ending. A total of 252 students completed this item. The aggregated fall average for all disciplines was 2.03. The range of scores was from 2.45 at South Wayne Elementary School to 1.42 at IPS, School 51. The aggregated spring average was 2.24. This is an increase of .21 points (10%) from the fall assessment for this item. The range of spring scores was from 2.58 at South Wayne to

1.94 at IPS, School 51. The largest increase in students' fall to spring demonstrated writing ability for this item was at IPS, School 51 (.52), followed by increases at Van Buren (.25), and South Wayne (.13). A single school, Kendall Elementary produced a decrease in its average (-.02) score from fall to spring assessments.

Schools producing increases for this item experienced modest to good increases from the fall to spring assessments. With the exception of a single school, all schools performed at or near the 2.0 or higher range for this item on both the fall and spring assessments. Findings for this item suggests that PACE students, as a group, are demonstrating good levels of ability in expressing their ideas by including a beginning, middle, and end on their written work in the arts discipline in which they are engaged.

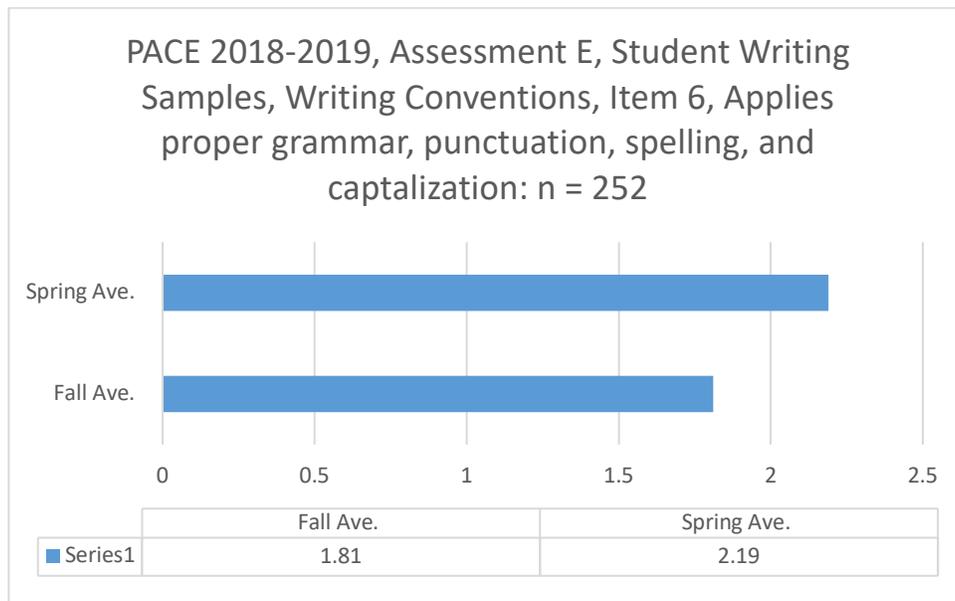


Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Item 5: Has a beginning, middle and end for writing prompts reveal that the aggregated fall and spring averages for this period increased from 2.01 to 2.40 respectively or an increase of .39 points (17%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018 assessments produced a higher average for this item (2.63) than the 2018-2019 assessments (2.03), the 2016-2017 assessments (1.90) and the 2015-2016 (1.48) assessments. PACE students' annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of 1.15 points (44%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 3.02 points followed by the 2018-2019 spring average of 2.24 points, the 2015-2016 spring average of 2.18 points, and the 2016-2017 average of 2.16 points or an increase of .86 points (29%) on the spring assessments of this item over the four-year period. This represents a substantial increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making very good annual improvements in expressing themselves through a beginning, middle, and ending in their responses to writing prompts about their engagement with the arts discipline in which they were engaged.



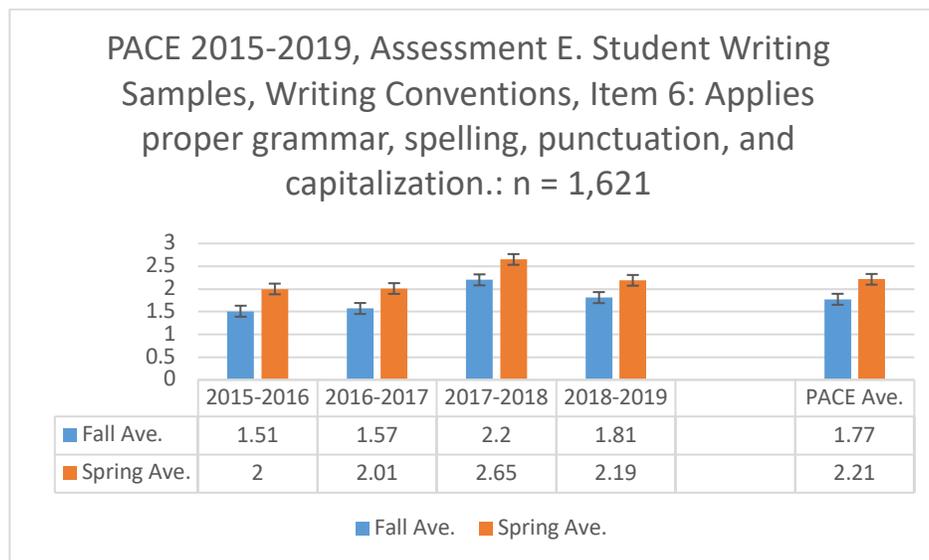
Assessment of 2018-2019 PACE students' writing skills included an item focused on the measurement of writing conventions or the correct uses of grammar, punctuation, spelling, and capitalization in their written responses on writing prompts (Item 6). A total of 252 students completed this item. The aggregated fall average for all disciplines was 1.81. The range of scores was from 2.49 at South Wayne Elementary School to 1.33 at IPS, School 51. The aggregated spring average was 2.19. This is an increase of .38 points (17%) from the fall average for this item. The range of spring scores was from 2.73 at South Wayne to 1.86 at Kendall Elementary School. The largest increase in students' fall to spring demonstrated writing ability for this item was at IPS, School 51 with an increase of over three quarters of a point (.67). This increase was the largest among all schools and all items for this assessment. This increase was followed by increases at Van Buren (.38), and Kendall and South Wayne (.24 each).

Schools producing increases for this item experienced good increases from the fall to spring assessments. Findings for this item suggests that PACE students, as a group, are demonstrating good levels of ability in using proper grammar, punctuation, spelling, and capitalization in responses to the writing prompts implemented for the arts disciplines in which they were engaged.



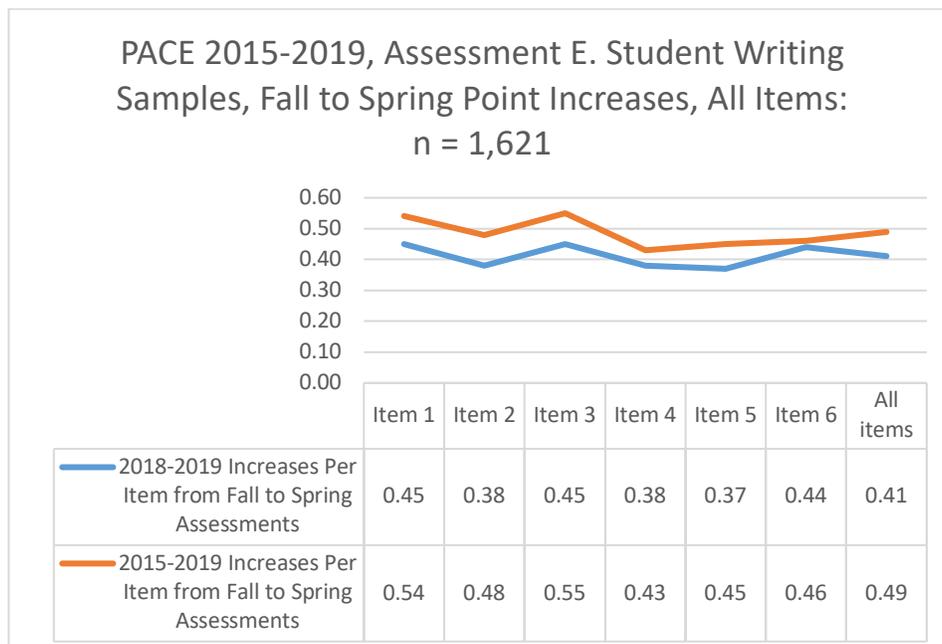
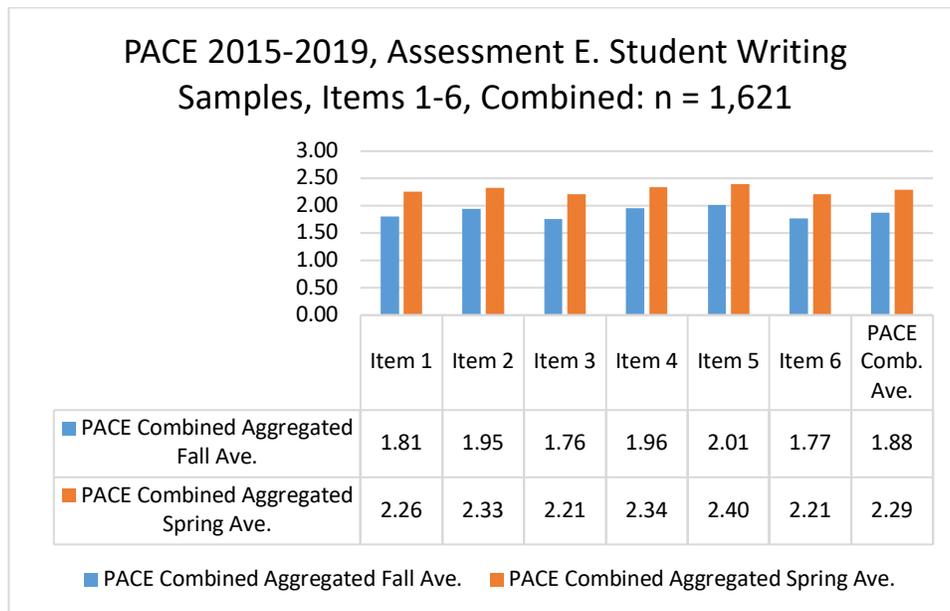
Comparisons of PACE 2015-2016 through 2018-2019 aggregated average scores for Student Writing Sample, Writing Conventions, Item 6: Applies proper grammar, punctuation, spelling, and capitalization reveal that the aggregated fall and spring averages for this period increased from 1.77 to 2.21 respectively or an increase of .44 points (20%) over the duration of the study. A total of 1,621 students completed this item during this period. Comparisons of findings from this period reveal that the aggregated fall averages from the 2017-2018

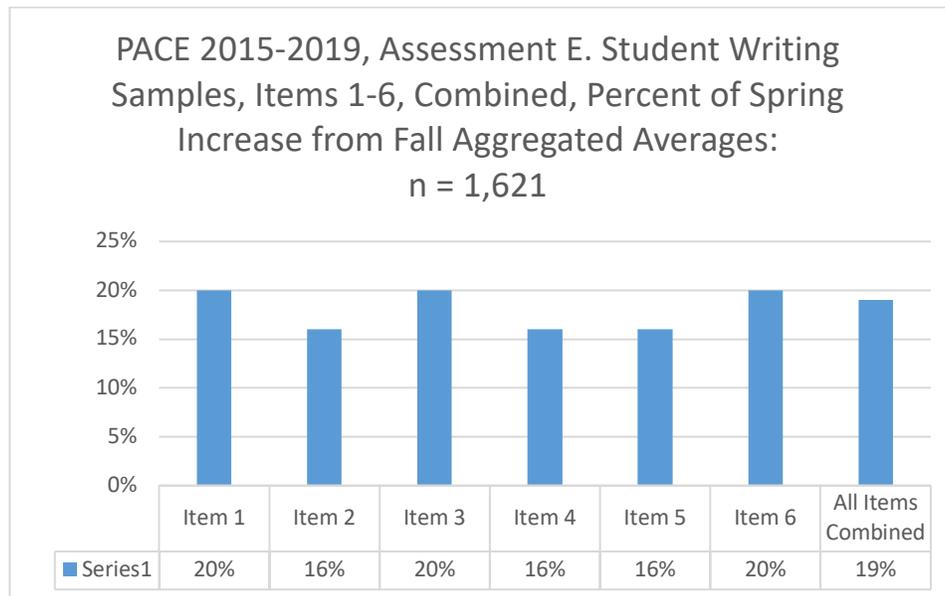
assessments produced a higher average for this item (2.20) than the 2018-2019 assessments (1.81), the 2016-2017 assessments (1.57), and the 2015-2016 (1.51) assessments. PACE students' annually improved their aggregated averages on fall assessments over the course of the study with an overall increase of .69 points (32%) over the four-year period. The spring assessment average for 2017-2018 was the highest with 2.65 points followed by the 2018-2019 spring average of 2.19 points, the 2015-2016 spring average of 2.01 points, and the 2016-2017 average of 2.00 points or an increase of .65 points (25%) on the spring assessments of this item over the four-year period. This represents a modest, but acceptable increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students are making fair annual improvements in using the writing conventions of grammar, spelling, punctuation, and capitalization in their responses to writing prompts about their engagement with the arts discipline in which they were engaged. This item produced lower increases than the other five items on the assessment. However, acceptable levels of increases were produced from the fall to spring assessments for this item.



Comparisons of 2015-2016 through 2018-2019 data from all six items on the Student Writing Skills Assessment, indicate that the combined aggregated averages for all items on the assessment improved from the fall assessments with an aggregated score of 1.88 to 2.29 on the spring assessments. An increased combined aggregated average of .41 points (18%) was produced for this assessment over the four-year period of the study. Acceptable levels of positive growth were demonstrated by scores for all items on this assessment. Average combined scores among all items included modest levels of variation in performances. Item 3, Includes creative, unique and/or new thoughts and ideas demonstrated the most improvement (.55 or 25%) followed by Item 1, Utilizes arts vocabulary (.54 or 25%), Item 2, Demonstrates understanding of arts activity (.48 or 21%), Item 6, Applies proper grammar, spelling, punctuation, and capitalization (.46 or 21%), Item 5, Has a beginning, middle, and end (.45 or 19%), and Item 4, Expresses ideas in complete sentences (.43 or 19%) for the period under

study. These findings demonstrate that PACE students are producing acceptable, but modest improvements in their writing skills over the period of the study for all writing skills assessed and within each of the arts disciplines in the PACE program.





## PACE Student Attitudes Report

In coming to terms with what students learn in schools and educational programming, measurement of learning typically focuses on knowledge acquisition and the development of cognitive or physical skills that may manifest themselves in academic performances or products or in higher order thinking and problem-solving capacities. Often, missing from the measurement of learning is the measurement of the affective learning of students (Wilkerson & Lang, 2007). Chief among these is measurement of the development of attitudes toward learning and more especially the measurement of students' attitudes toward learning in the arts.

Attitudes play an important role in all learning. Educational experiences contribute to attitude formation and development over time (Eisner, 2002). Attitudes fuel students' motivation to learn and to their persistence in learning (Eisner, 2002). Attitudes formed in childhood often persist into adulthood (Mueller, 1986). Actions taken by individuals often are the result of attitudes they hold about a particular issue, topic, or question (Mueller, 1986, Stoop, 1996). Attitudes related to the arts and arts education that are formed by students in elementary school may be a significant indicator of their engagement and continuing education in the arts throughout adulthood (Eisner, 2002).

For these and other reasons, PACE students' attitudes related to the arts and arts education were measured. The focus of the measurement was upon students attitudes related to (1) engagement in arts learning, (2) implications for developing or building self-esteem and/or self-confidence, and (3) their understanding of the role the arts play in communication and interactions with others.

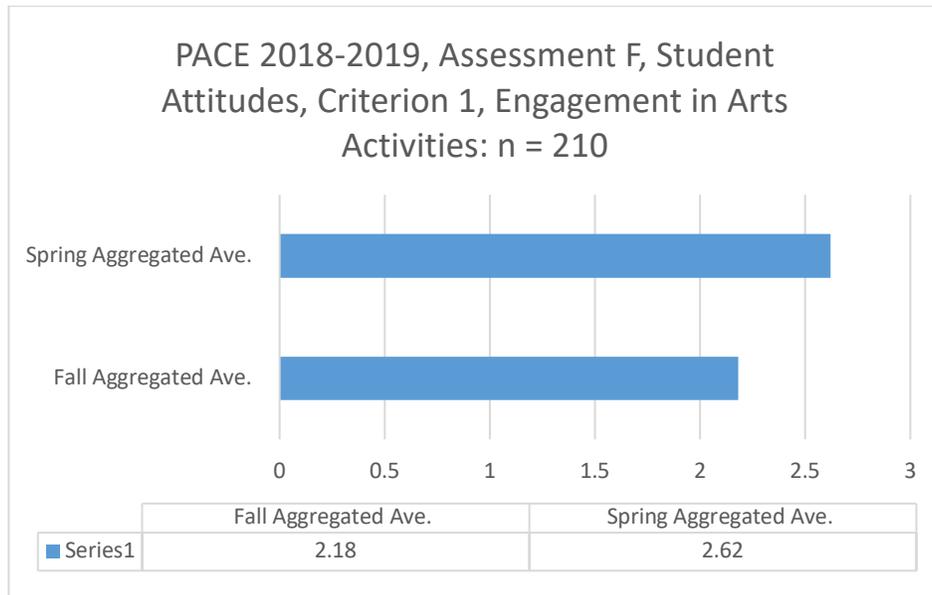
The *PACE Student Attitude During Art Activities* instrument was developed to focus on attitudes displayed by students during their engagement with arts learning (See Appendix G). Participating artists and teachers observed and evaluated student attitudes between the fall and spring semesters of the 2015-2016 school year; however, due to an administrative decision to decrease the workloads required of arts teachers and teaching artists, this assessment was not conducted during the 2016-2017 study. It became evident that measurement of student attitudes about their engagement in the PACE program was essential for gauging the short and long-term impact and development of their attitudes about the arts and about their

engagement with the PACE program. As a result, this assessment was re-implemented for the 2017-2018 study and was continued for 2018-2019. Data were collected from all schools for this assessment during 2018-2019, with the exception of IPS, School 51 from which no data were collected. The assessment was completed by the arts teachers or teaching artists. Students' attitudes related to (1) *Engagement*, (2) *Self-Esteem/Confidence*, and (3) *Communication/Interaction* were evaluated. A rubric for evaluating these attitudes was provided to participating schools. (See Appendix G.) The rubric included a three-point performance scale. Student attitudes were measured during the fall semester and again in the spring semester.

Assessment of 2018-2019 PACE students' attitudes related to their Engagement during arts activities (Criterion 1) was completed. A total of 210 students were assessed with this criterion. The aggregated fall average for all disciplines was 2.18. The range of scores was from 2.50 for South Wayne to 2.00 at Van Buren Elementary School. The aggregated spring average was 2.62. This is an increase of .44 points (17%) from the fall average for this item. The range of spring scores was from 2.82 at South Wayne to 2.42 at Kendall. The largest increase in students' attitude for this item was at Van Buren with an increase of nearly two-thirds of a point (.60 or 17%), followed by increases at Kendall (.37 or 15%), and South Wayne (.32 or 13%).

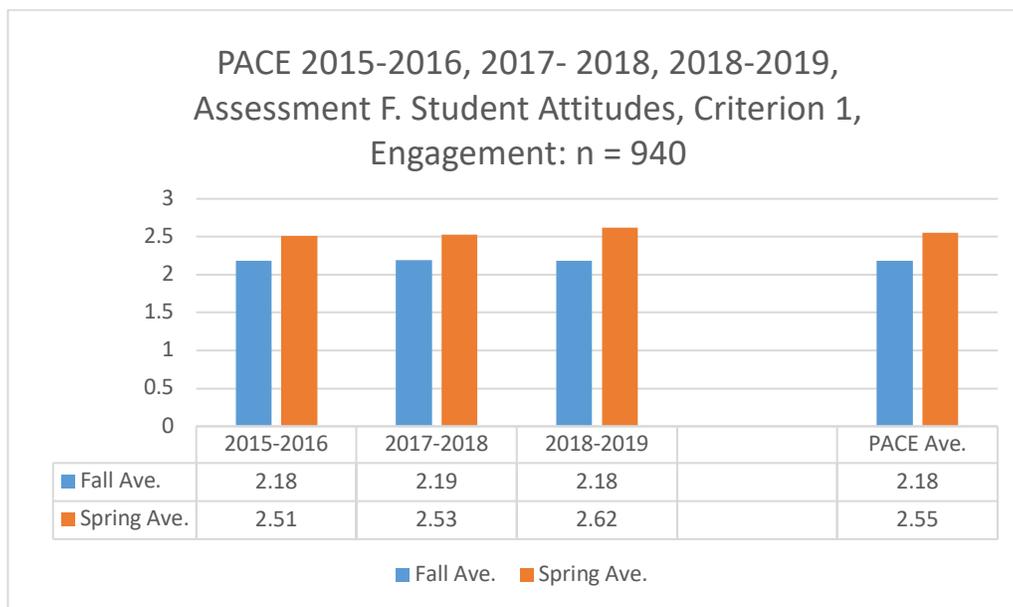
Schools producing increases for this item experienced modest increases from the fall to spring assessments. All schools performed at the 2.0 or higher range for this item on the fall and spring assessments. Spring averages were in the acceptable range. Findings for this item

suggest that PACE students, as a group, are demonstrating good attitudes about their engagement in arts activities for the arts disciplines in which they participated.



Comparisons of PACE 2015-2016, 2017-2018, and 2018-2019 aggregated average scores for Student Attitudes, Criterion 1: Engagement in Arts Activities, reveal that the aggregated fall and spring averages for these two periods increased from 2.18 to 2.55 or an increase of .37 points (15%) for those periods. A total of 940 students completed this item during those periods. Comparisons of findings from this period reveal that the aggregated fall averages from the 2018-2019, 2017-2018 and 2015-2016 assessments were nearly identical (2.18, 2.19, and 2.18 respectively). The spring aggregated assessment average for 2017-2018 (2.53) and the 2015-2016 spring average (2.51) also were nearly identical with a slight higher increase for this item in the 2018-2019 spring average (2.62). The increase from the 2018-2019 aggregated average increased by .44 points (17%) and the 2017-2018 aggregated average increased by .34

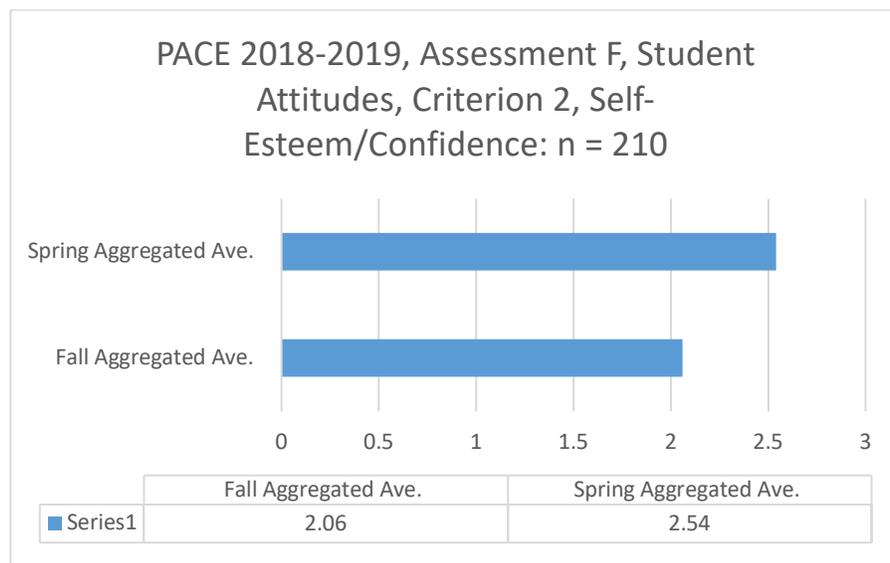
points (14%), while the 2015-2016 aggregated average increased by .33 points (14%). These increases represents modest, but acceptable increase in spring average scores for this item. Increased aggregated averages on the fall and spring assessments for this item suggest that PACE students' attitudes related to their engagement in arts activities are making good annual improvements with regard to the arts discipline in which they were engaged.



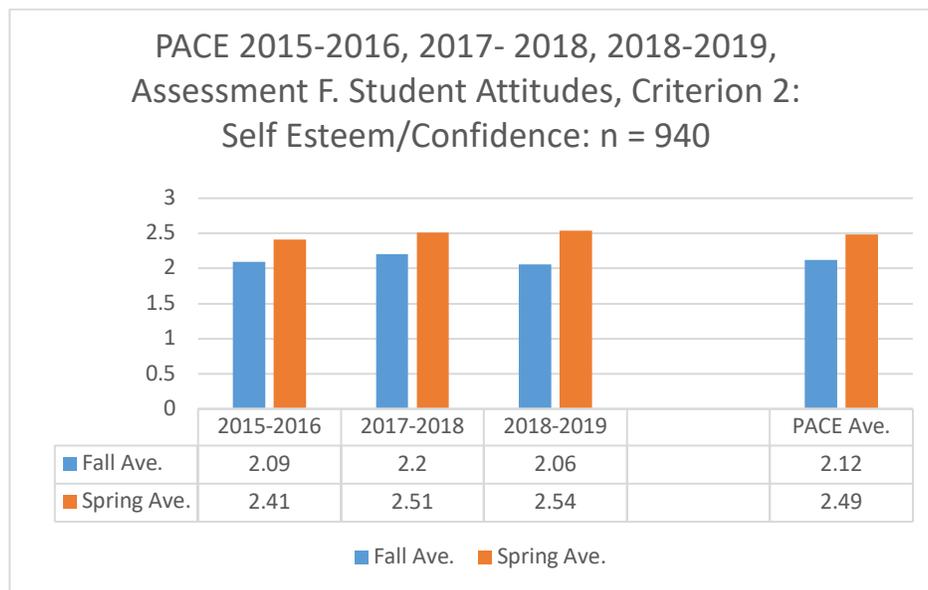
Assessment of 2018-2019 PACE students' attitudes related to their Self Esteem and/or Confidence during arts activities (Criterion 2) was completed. A total of 210 students were assessed with this criterion. The aggregated fall average for all disciplines was 2.06. The range of scores was from 2.32 at South Wayne to 1.87 at Kendall Elementary School. The aggregated spring average was 2.54. This is an increase of .48 (19%) from the fall average for this item. The range of spring scores was from 2.73 at South Wayne to 2.42 at Kendall Elementary School. The

largest increase in students' attitude for this item was at Kendall (.55), followed by increases at Van Buren (.50) and South Wayne (.41).

Schools producing increases for this item experienced modest to good increases from the fall to spring assessments. All schools performed at or near the 2.0 range of scores for this item on the fall assessments. On the spring assessment, all schools performed at or above the mid-level of the 2.00 level. Spring averages were in the acceptable range. Findings for this item suggest that PACE students, as a group, are experiencing slight improvement in attitudes about self-esteem and confidence in arts experiences for the arts disciplines in which they were engaged.



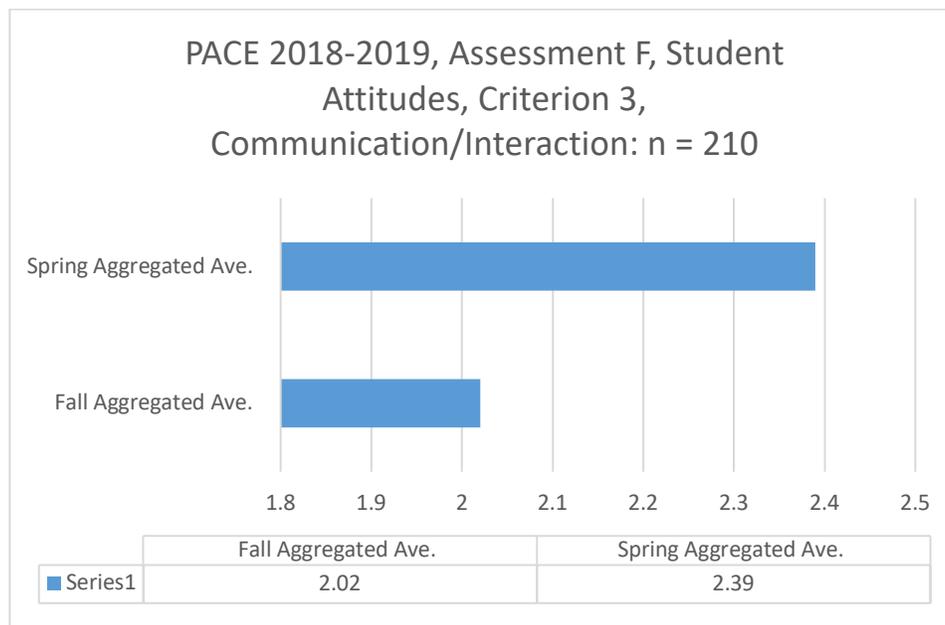
Comparisons of PACE 2015-2016, 2017-2018, and 2018-2019 aggregated average scores for Student Attitudes, Criterion 2: Self Esteem and/or Confidence while engaging in in Arts Activities, reveal that the aggregated fall and spring averages for these three periods increased from 2.12 to 2.49 or an increase of .37 points (15%) for those periods. A total of 940 students completed this item during those periods. Comparisons of findings reveal that the aggregated fall averages from the 2017-2018 was slightly higher (2.20) than the 2018-2019 aggregated average ( 2.06) and the 2015-2016 aggregated average (2.09) or a difference of .11 points (5%). The spring aggregated assessment average for 2018-2019 (2.54) was slightly higher than averages from 2017-2018 (2.51) and 2015-2016 (2.41) averages. The 2018-2019 aggregated average represents an increase of .13 points (6%) from the 2015-2016 aggregated average. This increase represents slight, but acceptable increase in the spring average score for this item. An increased aggregated averages on the fall and spring assessments for this item suggest that PACE students' demonstrated attitudes related to their self-esteem and confidence are making fair annual improvements with regard to the arts discipline in which they were engaged.



Assessment of 2018-2019 PACE students' attitudes related to their Communication and Interaction with other students and instructors during arts activities (Criterion 3) was completed. A total of 210 students were assessed with this criterion. The aggregated fall average for all disciplines was 2.02. The range of scores was from 2.22 at South Wayne to 1.86 at Kendall Elementary School. The aggregated spring average was 2.39. This is an increase of .37 points (16%) from the fall average for this item. The range of spring scores was from 2.65 at South Wayne to 2.12 at Kendall Elementary School. The largest increase in students' attitude for this item was at South Wayne (.43), followed by increases at Van Buren (.40) and Kendall (.26).

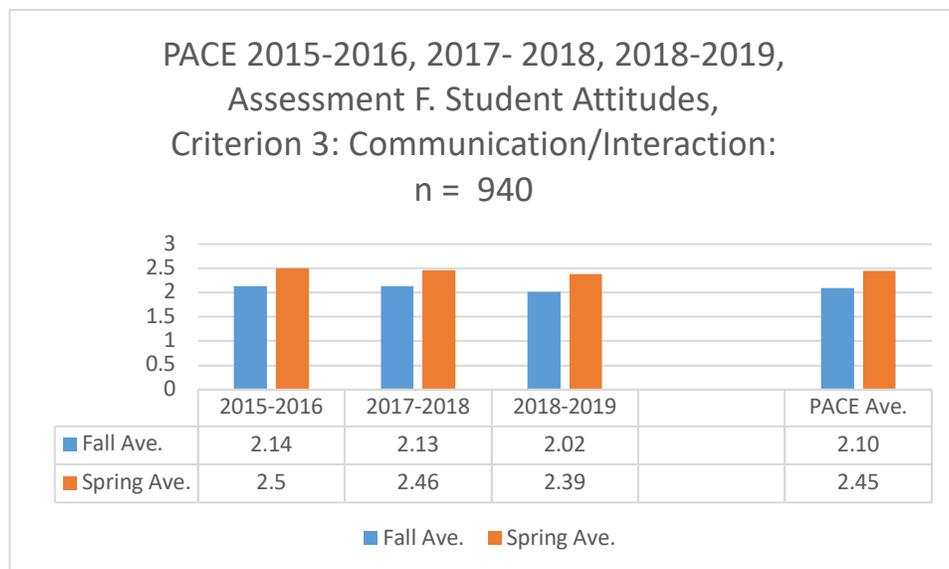
Schools producing increases for this item experienced good increases from the fall to spring assessments. Two schools performed at the 2.0 or higher range for this item on the fall assessments with one other performing at a slightly lower level lower levels (1.86). On the

spring assessment, all schools, performed above the 2.00 level. Spring averages were in the acceptable range. Findings for this item suggest that PACE students, as a group, are demonstrating modest to good improvement in their communications and interactions in arts experiences for the arts disciplines in which they were engaged.



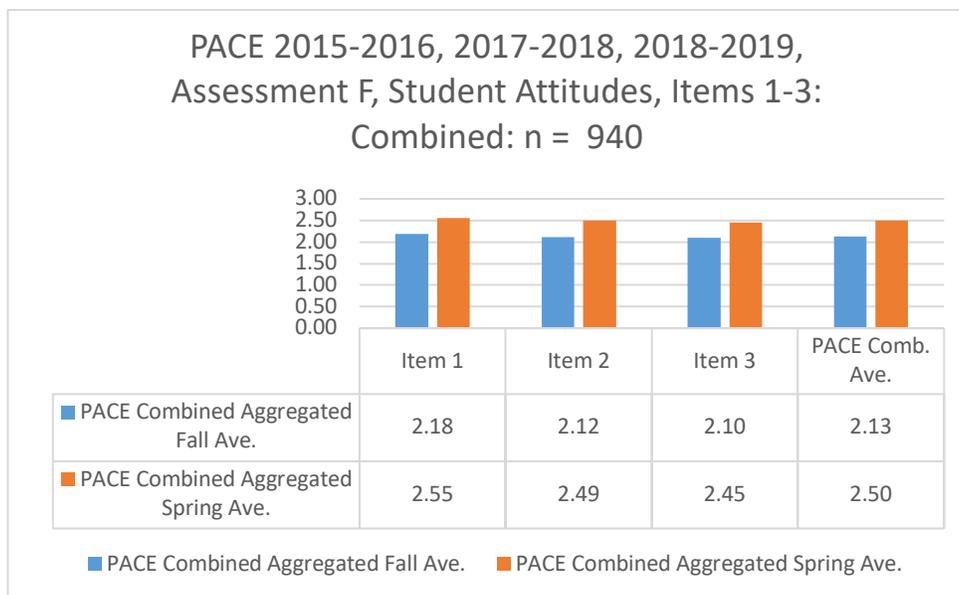
Comparisons of PACE 2015-2016, 2017-2018, and 2018-2019 aggregated average scores for Student Attitudes, Criterion 3: Communication and Interaction while engaging in in Arts Activities, reveal that the aggregated fall and spring averages for these three periods increased from 2.10 points to 2.45 points or an increase of .35 points (14%) for those periods. A total of 940 students completed this item. Comparisons of findings reveal that the aggregated fall and spring averages from the 2015-2016 study was slightly higher (2.14 and 2.50 respectively) than the 2017-2018 aggregated fall and spring averages (2.13 and 2.46 respectively) or the 2018-

2019 aggregated fall and spring averages (2.02 and 2.39 respectively). Increases of .37 points (14%) for the 2018-2019 fall to spring assessments, .36 points (15%) for the 2015-2016 fall to spring assessments, and an increase of .33 points (14%) for the 2017-2018 fall to spring assessments represent modest, but acceptable increases in the spring average score for this item. An increased aggregated averages on the fall and spring assessments for this item suggest that PACE students' demonstrated attitudes about communication and interaction while engaged in arts activities are making fair annual improvements with regard to the arts discipline in which they were engaged.

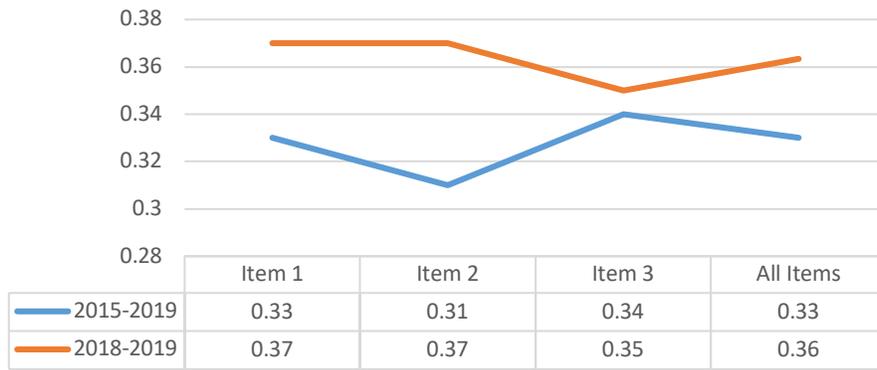


Comparisons of 2015-2016, 2017-2018, and 2018-2019 data from all three items on the Student Attitudes Assessment, indicate that the combined aggregated averages for all items on the assessment improved from the fall assessments (2.13) to the spring assessments (2.50). An increased combined aggregated average of .37 (15%) was produced for this assessment over

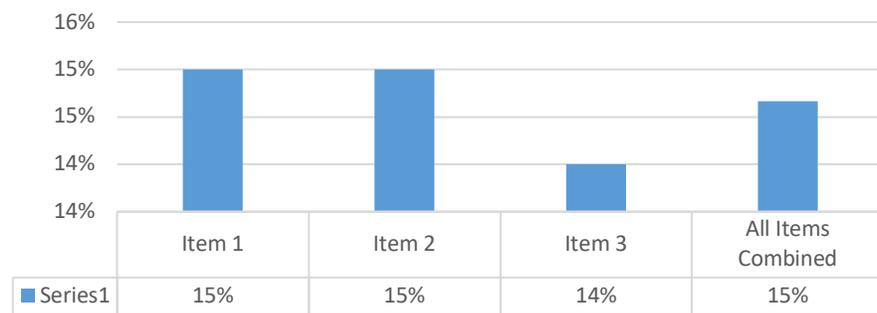
the two measurements in the study. Acceptable levels of positive growth were demonstrated by scores for all items on this assessment. Average combined scores among all items included nearly no significant variation in levels of performances among the three items. Item 3, Communication and Interaction and Item 2, Self Esteem and Confidence produced the most improvement (.37 or 15% each) followed by Item 1, Engagement (.33 or 13%) for the period under study. These findings suggest that PACE students are exhibiting modestly increasing attitudes about their involvement within each of the arts disciplines in which they are engaged in the PACE program.



PACE 2015-2016, 2017-2018, 2018-2019,  
Assessment F, Student Attitudes, Point Increases  
Per Item from Fall to Spring Increases, All Items:  
n = 940



PACE 2015-2016, 2017-2018, 2018-2019,  
Assessment F, Student Attitudes, Items 1-3,  
Combined, Percent of Spring Increase from Fall  
Aggregated Averages: n = 940



## PACE COMBINED ASSESSMENTS SUMMARY REPORT

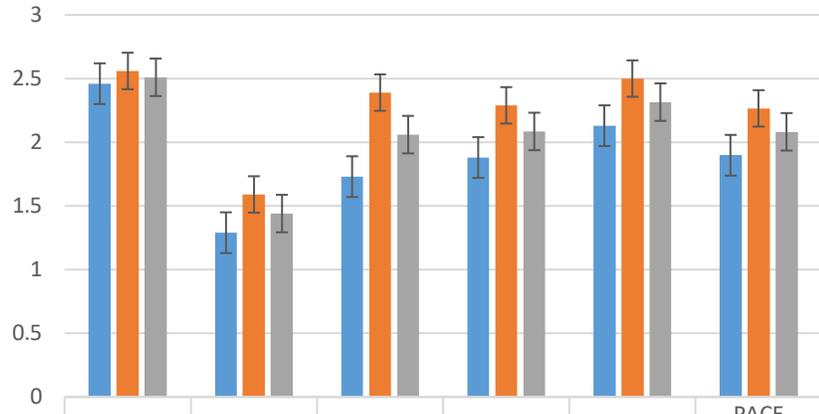
The PACE program utilized five assessments to measure student progress in meeting the goals set for the program. These assessments included the following: A, B, *PACE Student Survey*, C. *PACE Student Knowledge Assessment*, D. *PACE Artist Assessment of Individual Student Skills*, E. *PACE Student Writing Samples Assessment*, and F. *PACE Student Attitude During Art Activities Assessment*. These assessments were conducted during each year of the study beginning in the 2015-2016 academic year through the 2018-2019 academic year. The assessments were conducted in all PACE schools, all arts disciplines, and in all participating grade levels during this period. The *PACE Student Attitude During Art Activities Assessment* was used during the 2015-2016, 2017-2018, and 2018-2019 academic years, but not during the 2016-2017 academic year as previously reported.

The following includes a report of the combined aggregated performances for these assessments for the period of 2015-2016 through 2018-2019. The combined aggregated fall average from all six assessments (A, B, C, D, E, F) was 1.90. The range of averages was from 2.46 on Assessment A, B, *Student Survey* to 1.29 on Assessment C, *Student Knowledge*. Combined aggregated fall averages from the other assessments in descending order included 2.13 for the F. *Student Attitudes Assessment*, 1.88 on the E. *Student Writing Sample Assessment*, and 1.73 on the D. *Student Skills Assessment*.

The combined aggregated spring average from all six assessments (A, B, C, D, E, F) was 2.27 or an increase of .37 points (16%) from the fall averages for the combined scores from all assessments for the four-year period of the study. The range of spring averages was from 2.56 on Assessment A, B, *Student Survey* or an increase of .10 points (4%) from the fall average, which was the smallest increase among all assessments in the PACE program, to 1.59 on Assessment C, *Student Skills Assessment* or an increase of .30 points (19%). Combined aggregated spring averages from the other assessments in descending order included 2.50 for the F, *Student Attitudes Assessment* or an increase of .37 points (15%), 2.39 for Assessment D Student Skills or an increase of .66 points (28%), which was the largest increase in averages among all assessments from fall to spring assessments, and 2.29 on the E, *Student Writing Sample Assessment* or an increase of .41 points (18%).

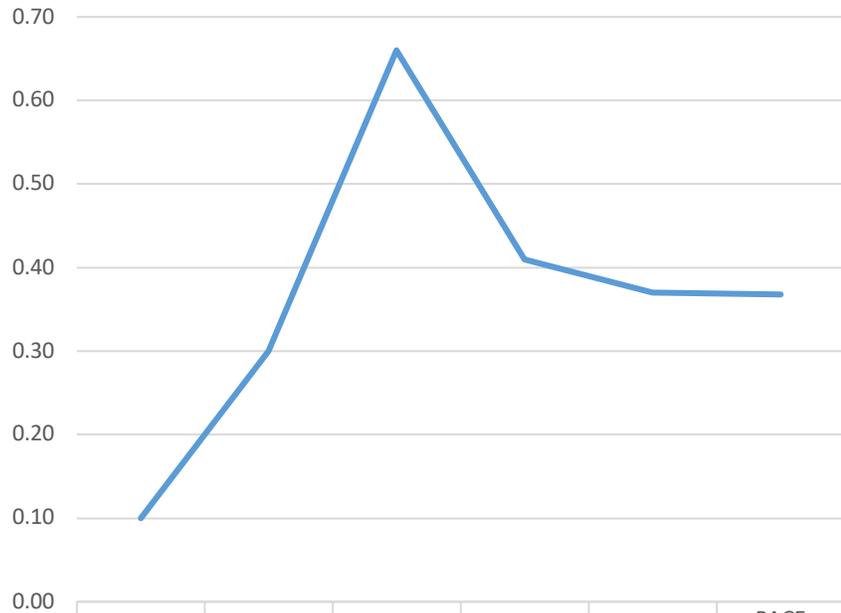
The PACE combined aggregated averages for each assessment instrument for the four-year period of the study spanned a range from 2.51 Assessment A, B *Student Survey* to 1.44 on Assessment C, *Student Knowledge*. The PACE combined aggregated averages for the additional assessments included in descending order, Assessment F, *Student Attitudes Assessment* with a combined average of 2.32, followed by Assessment E, *Student Writing Sample Assessment* with a combined average of 2.09, and Assessment D, *Student Skills Assessment* with a combined average of 2.06. The PACE Combined aggregated average for all assessments for the four-year period of the study was 2.08.

PACE 2015-2019, Assessments A, B, C, D, E, F, Combined  
Aggregated Averages for All Items: N = 1,645

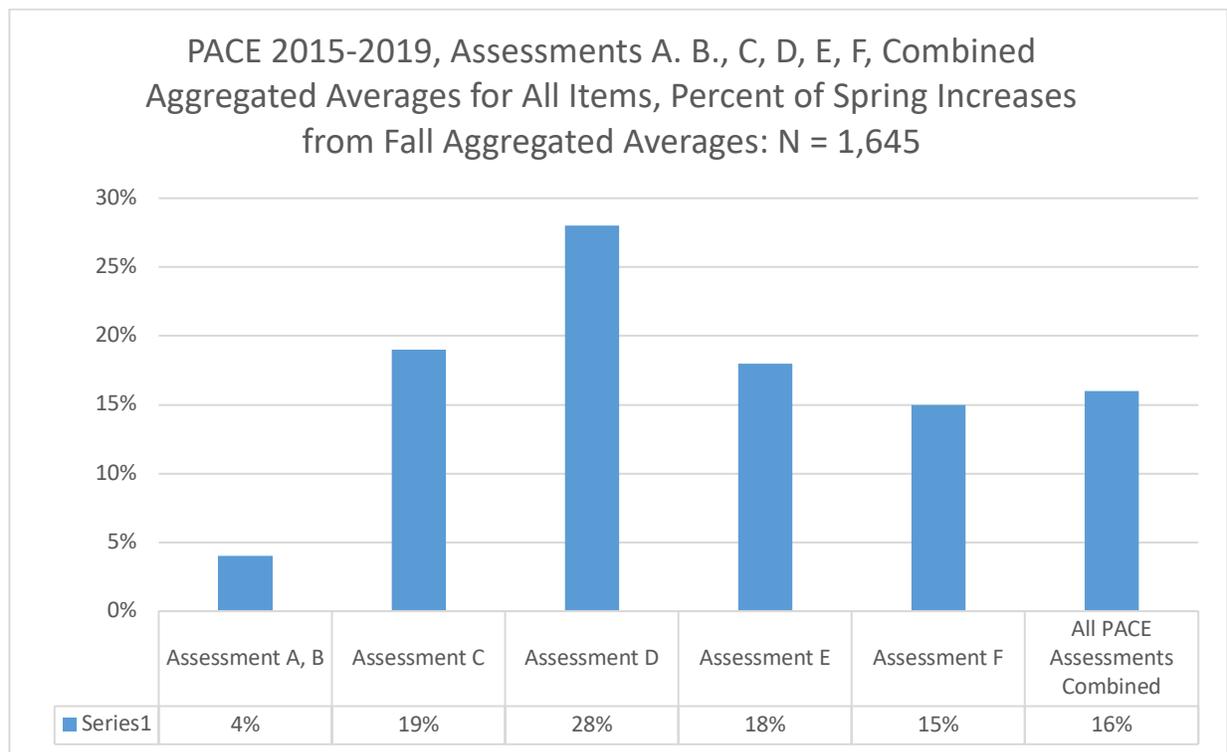


	Assessment A, B	Assessment C	Assessment D	Assessment E	Assessment F	PACE Combined Aggregated Ave.
Fall Combined Aggregated Ave.	2.46	1.29	1.73	1.88	2.13	1.90
Spring Combined Aggregated Ave.	2.56	1.59	2.39	2.29	2.5	2.27
PACE Combined Aggregated Ave.	2.51	1.44	2.06	2.09	2.32	2.08

**PACE 2015-2019, Assessments A, B, C, D, E, F, Fall to Spring  
Combined Aggregated Point Increases for All Items: N = 1,645**



	Assessment A, B	Assessment C	Assessment D	Assessment E	Assessment F	PACE Combined Aggregated Ave.
Increases Per Item from Fall to Spring Measurements	0.10	0.30	0.66	0.41	0.37	0.37



## DISCUSSION

The PACE program is a comprehensive program for providing an integrated approach to arts education and literacy development in elementary schools. The program included input from arts educators, classroom teachers, teaching artists, and administrators in the schools conducting PACE programs. The program incorporated five assessments that addressed students' general knowledge of the arts, discipline specific knowledge, discipline specific skills, students' writing about the arts, and students' demonstrated attitudes about their involvement in the PACE program.

In the preceding portions of this report, summaries of data for each of these measures were provided. Aggregated statistics were included in order to provide summary markers for understanding how well the PACE program functioned relative to the goals of the program and to determine the overall impact the PACE program has had on students learning and attitudes toward the arts and arts education. The following includes a discussion of the findings for each of the five assessments and consideration of the impact the PACE program has had on student achievement and learning in the arts. Discussions will be limited to the summaries of aggregated findings produced over the four-year duration of the 2015-2016 through 2018-2019 academic years in which this study was conducted.

### Student Survey of General Arts Knowledge

An instrument was created for measuring students' general knowledge of the arts, Assessment A, B. *PACE Student Survey* (See Appendix C). Battery A of the assessment was structured for implementation with first grade students and survey sheets with emoji's were provided for student responses to items. Battery B of the assessment included survey sheets with spaces for students to write their responses. A total of 1,635 students completed this assessment over the course of the study. In surveying students' general knowledge about the arts, it was clear from the composite findings from this instrument that PACE students, as a group, have positive general knowledge about the arts and arts education. They produced responses that were above 2 points on a three-point scale for all items on the Student Survey. The PACE aggregated average for this assessment rose from 2.46 points on the fall assessment to 2.56 points or 4% on the spring assessment. Although modest, this increase demonstrates a

positive development of students' general knowledge of the arts across all items this assessment measured.

A closer look at findings for each item on the survey suggests the following:

(1.) PACE students like to be engaged in arts learning. (Item 1. I like to (make art, dance, make music, act like someone else or something else). This was the highest performing item on this instrument. The aggregated fall and spring averages for this item were the highest of all items on this assessment. This finding suggests that students have a sense of accomplishment, engagement, and enjoyment in their arts learning and that they have heightened interest in ongoing learning about the arts and in participating in learning in the arts.

(2.) Students want to learn more about the arts. (Item 2. I want to learn more about (art, dance, music, acting). Findings for this item revealed that it is the second highest performing item of the three items on this assessment. The positive scores for this item support students' interest in wanting to learn more about the arts. Findings for this item, support the conclusion that PACE students are positively motivated and want to pursue their learning in the arts and want to learn more about the arts.

(3.) Students think that learning in the arts is an important part of school. (Item 3, I think learning about art and making art, dance and dancing, music and making music, and theatre and acting is an important part of school.) On this, the lowest performing item on this assessment, PACE students appear to have positive responses to the importance of arts education in schools. Even though the combined aggregated average produced for this item

was the lowest on this assessment, it is among the higher averages among all items on all assessments in the PACE program.

It is unclear from this assessment whether PACE students have made connections with the relationship learning in the arts has with learning in other disciplines in school. It is possible that because of the beginning levels of learning in all subject areas generally present in all elementary school curricula that students have not linked knowledge and skills they acquire through the PACE program with learning in other disciplines. More sophisticated connections, demonstrations, or integration of arts learning with other disciplines may be needed to foster the interconnectedness of learning between the arts and other disciplines among students and to help students better understand the long range impact the arts have in their daily lives, occupations, and quality of life.

Responses for all items on the *Student Survey Assessment* showed positive growth when measured over time. These findings collectively support the conclusion that students in PACE programs felt positively about their engagement with arts education and in the PACE programs their schools provided. They also suggest that students' general knowledge of the arts and learning in the PACE program was positive and included increases in scores on all items included on the *Student Survey Assessment*.

### Student Knowledge and Vocabulary Survey

Students' discipline specific knowledge of the arts was assessed on the first half of the instrument that included three items (*Assessment C, Student Knowledge and Vocabulary*

*Survey*. See Appendix D); however, all discipline specific versions of this instrument included items with parallel content and focuses related to students' discipline specific knowledge. The second half of the instrument contained five additional items designed to measure students' understanding of discipline specific vocabulary related to the arts discipline focus of the school. Vocabulary in each school was identified by the arts educator and teaching artist at each school.

(1.) Findings for 2015-2016 through 2018-2019 on the *Student Knowledge and Vocabulary Survey* instrument, suggest that PACE students' performances for the three Knowledge assessment items increased from the fall to the spring assessments on all three items, in all grade levels, and in all discipline in the PACE program. Increases in students' art knowledge were consistent across all four years of the study. Individual school and grade level performance scores and scores grouped by arts disciplines varied with respect to degrees of improvement, but as a group, all PACE students demonstrated a modest, but acceptable level of improvement in their acquisition of arts knowledge over the course of the study. Combined findings from this assessment suggest that students are increasing their knowledge of the arts through their engagement in PACE.

(2.) Findings for the 2015-2016 through 2018-2019 period on this instrument suggest that as a group, PACE students' ability to describe different kinds of art, dance, music, and theatre (Item 1) increased the most with each advancing year of the program. Combined aggregated averages from this item were the highest performing among Knowledge items. Aggregated and combined averages for this item improved with each succeeding year of the

study and in each of the arts disciplines. There were modest degrees of variation among school, grade level, and discipline grouped scores for this item and an acceptable range of improvement in PACE students' knowledge acquisition was consistent over the course of the study. Increases in students' ability to describe different kinds of art, dance, music, and theatre suggest that the PACE program is expanding students' exposure to and engagement with an increasing range of learning and experiences in each of the disciplines in the PACE program. One of the key functions of curriculum and learning in elementary schools is to introduce new kinds of learning in each area of the curriculum and to engage students in freely exploring, experimenting, and developing increasingly sophisticated levels of experience and mastery in each of the disciplines. Findings for this item provide clear evidence that the PACE Program is functioning well in accomplishing this outcome. PACE students are capable of describing different kinds of art, dance, music, and theatre.

(3.) Students knowledge of where they could go to see art and artists, dance and dancers, and/or theatre and actors (Item 2) increased the second highest on this Knowledge assessment instrument. The aggregated and combined averages for this item improved with each succeeding year of the study and in each of the arts disciplines. There were modest degrees of variation among school, grade level, and discipline grouped scores for this item; however, an acceptable range of improvement in PACE students' knowledge acquisition for this item was consistent over the course of the study. Students' understanding of where art, dance, music, and theatre are seen may be the result of students' combined PACE arts learning and other social experiences and learning opportunities children have through mass media, digital

technology, or other life experiences with the arts in public places and venues. Assessment results for this item suggest that PACE students are increasing their knowledge of where they can go to see art, dance, music, and theatre.

(4.) Students' knowledge of whether people engage in the arts for enjoyment and/or as a job to earn money (Item 3) increased on each successive year of the study. Although combined increases in fall to spring scores for this item were the lowest of the three Knowledge items on this instrument, the improvements were consistent for each of the four years of the study with the biggest increase occurring during the previous year of the study. Students' increasing awareness that artists, dancers, musicians, and actors can be paid for their work and that careers in the arts can be pursued as a profession may be the result of combined learning in the PACE arts programs and learning in other disciplines outside of the arts that are included in the elementary curriculum of participating PACE schools. For students at the elementary level, employment and engagement in a profession in order to earn money is highly abstract and foreign to their experience. Numerous generalizations and misconceptions about the world of work exist in the minds of children. Career education is embedded in different areas of the curriculum and it is possible that the introduction of arts employment is not central in career education curriculum. Due to their lack of experience and learning about employment and their limited or non-existent experience in the world of work, combined with the pleasurable and personal experiences they have had with the arts and with arts learning to date as expressed in other PACE measures, elementary students may not perceive occupations in the arts as a job or a profession. Instead, they may perceive their involvement with the arts as something that is

done merely for pleasure or as a pastime. The evidence supporting students' understanding that people can and do hold jobs in the arts represents a level of sophistication that elementary students are only beginning to achieve. Additional research into this question is needed along with further tracking of students' understanding of this concept over time.

(5.) Each of the arts has vocabulary that is routinely used by those engaged in learning and creating in each of the arts. A fundamental focus of the PACE program is to provide educational experiences that will enhance students' engagement with and learning about key terminology and vocabulary commonly used in the arts. Items included on the Knowledge and Vocabulary assessment measured students' acquisition and use of arts vocabulary (See Table 2.). Findings from that assessment suggest that PACE students are successfully learning arts vocabulary. Findings from this assessment reveal that the largest increase in acquisition of arts vocabulary occurred during the 2018-2019 academic year. By learning arts specific vocabulary, students' achievement and creative expression in the arts is improved. As a possible related outcome, acquisition of arts specific vocabulary by PACE students may have potential for impacting the content and sophistication of ideas expressed in their writing and other communications about arts learning and experiences in the arts.

Findings from the Knowledge and Vocabulary assessment suggest that the PACE program collectively contributed to improving students' discipline specific knowledge and understanding of arts vocabulary. This improvement was evident in all schools and among all grade levels. Variations on degrees of improvement existed across grade levels, within schools, and across arts disciplines.

### Student Skills Survey

One of the critical areas of an education in any of the arts is in the area of skills and skill development. Each arts discipline has a full range of unique physical as well as cognitive skills that students of the arts must learn, master, and be able to demonstrate. There also are common skills that permeate all of the arts. These skills provide students with the common means to understand each of the arts as well as providing the means to demonstrate their understanding of the various arts forms while creating or responding to all of the arts disciplines.

A selection of skills related to the site specific discipline being studied at each PACE school was assessed using an instrument, *Individual Student Skills Assessment*, which included six items. Three of the items included non-discipline specific questions that could be applied to all three of the arts disciplines being taught at PACE schools. Three additional discipline specific items were included. These items enabled the teaching artists and arts teachers to identify specific skills related to the arts discipline and for lesson plans that would be taught in the schools. (See Appendix E for general non-discipline specific skills and Tables 3, 4, 5, and 6 for listings of individual site and discipline specific skills.) Student skills assessments were conducted during the fall and spring of the school year.

Findings for student skills were clustered by the arts discipline being addressed in the PACE program at the specific schools in the PACE program. Data from each discipline were analyzed to identify various levels of performance based on the discipline and not on the grade levels of PACE classes.

(1.) Learning in any discipline is in part, based on learning basic skills needed to accomplish learning in the discipline. Students in the PACE program were introduced to basic skills related to the arts discipline featured at their school. Teaching artists and art educators created educational experiences designed to help students learn these skills. The first item on the Student Skills Assessment focused on measuring the basic level of student skills in the arts discipline at their school. This item produced the highest spring aggregated average among all skills assessment items. Aggregated findings from all four disciplines showed that there were increases in students' acquisition of basic skills in all four disciplines and at all four schools from the fall to the spring assessments. Levels of basic skills also were reflective of the grade level of students in them with higher levels of basic skill competency being demonstrated at higher grade levels than of those exhibited at lower instructional levels.

(2.) The second item on the Skills Assessment focused on students' demonstrations of the effective application of practices, tools, or materials in the creative process for the arts discipline. PACE students produced the highest level of improvement on this item in the Skills Assessment with an increase of .78 points or 33% from the fall to spring assessments. As on the previous item, increases were identified at all four schools for this item from the fall to spring assessment. Skill development is highly dependent upon having access to tools and materials, but it also is dependent upon having enough time and instruction in the proper applications and uses of tools and materials in order to develop the requisite skills needed to skillfully communicate in any art form.

(3.) The third skill assessed focused on students' understanding and application of the sequences or processes for creating an activity or work in the arts discipline. This item produced the second highest spring average for skills assessment with an increase of more than two-thirds of a point (.62 points or 29%). All schools and all grade levels produced increases for this item. Artistic expression and the safe use of materials and tools requires an understanding of how to follow numbers of steps or procedures in arts activities or works. It appears as if PACE students are demonstrating increasing levels of understanding the application of sequences and processes through their involvement in the PACE program.

(4.) Increases in student skill development as described in these three assessment items suggest that PACE students made good progress in developing their essential arts related skills. These three items were included on the Skills Assessment and were common across all four disciplines. With a combined increase of more than two-thirds of a point (.67 points), on a three point scale, for these three items, this finding suggests that PACE students demonstrated increases in their basic level of skill in each discipline; increases in their ability to effectively apply practices, tools or materials in the creative arts processes; and that PACE students understand and can apply sequences or processes used in creating arts activities or works in the arts. Of all PACE assessments, improvements in skills assessments were the highest when compared to all other assessments and suggest that the PACE program is significantly contributing to the development of arts skills in all PACE students.

(5.) The remaining three items on the Skills Assessment included site specific and discipline specific skills identified by the artists and teachers in participating PACE schools.

Among these items the combined averages from all schools produced positive trends in the development of each of the site and discipline specific skills. Compared with the previous three skill items on this assessment, the amount of improvement for the combined measurement of discipline specific skills (Items 4, 5, and 6) produced good levels of improvement (.54 points or 23%) on the Skills Assessment.

The average increases in scores across all items and among all disciplines demonstrated varying degrees of improvement. Across all disciplines, all items, and all schools, the increase from the fall to spring assessment produced an average of .66 points or an improvement of 28% from the fall to spring assessments. The combined Skills Assessment scores for all schools and grade levels and for all skills, suggest that the PACE program was instrumental in contributing to arts skills development among all students in all schools and in each arts discipline in the PACE program.

### Student Writing Samples Survey

One of the principal focuses of the PACE program is on the development of links between literacy and the arts. All forms of literacy are essential aspects of understanding each art form and for expressing ideas in and through each of the arts. The concept of arts literacy can be expressed and understood in numerous and varied ways. Being able to watch a play and to understand its meaning and messages is one fundamental form of literacy in the arts. Understanding how all of the various aspects of production and performance collectively contribute to communicating the meaning or message of the play is a different and essential form of literacy in theatre. Being able to articulately express the meaning of the play and the

contributions of theatrical production and performance expressed in the play through written or oral forms of communication, while correctly using theatre specific vocabulary and theatrical concepts through the correct use of English, grammar, spelling, capitalization, punctuation and other means through which students can capture and express their broad understanding of a theatrical work, is yet another form of literacy. The PACE program is interested in exploring each of these foci and their roles in the PACE program.

The critical question of whether education in the arts directly contributes to literacy development among participating PACE students is of importance in evaluating and fully understanding the effects of the PACE program on students' learning. Findings from the Student Writing Samples Assessment support a number of conclusions regarding students' improved uses of language arts in understanding and communicating about the arts in written and oral communications. However, the structure of the PACE program and this longitudinal study of the PACE program are not intended to identify how arts education contributes to literacy achievement or to determine whether Language Arts literacy is positively or negatively impacted by learning in the arts through causal or correlational connections. This study was not structured to measure PACE students' literacy growth as it relates to state and national literacy standards. Such a study is beyond the scope of this ongoing program and of this study. At this point in time, no research-based studies that have established a positive or negative causal relationship between achievement in Language Arts and the visual and performing arts have been conducted by the field. Instead, the PACE program has attempted to identify how students' writing in the arts reflects their arts learning in how they capture their ideas and

content, how they organize their responses, and through their use of writing conventions, such as proper grammar, punctuation, spelling, and capitalization, generally associated with Language Arts learning. Although these criteria could be mapped to specific Language Arts standards, such a purpose was not intended for this study.

Students arts learning was assessed through analyses of students' written responses on selected prompts created by teaching artists and arts educators in PACE schools. Assessment E. the *PACE Student Writing Sample Assessment* was completed in the fall and spring of each year in the study. The following report includes description of findings from the *PACE Student Writing Sample Assessment* for the period of 2015-2016 through 2017-2018 academic years in the study.

Summaries of aggregated scores on the *PACE Student Writing Samples Assessment* reveal that increases in average net scores from the fall to spring assessments were produced in all PACE schools. The fall combined aggregated assessment average was 1.88 for the 2015-2016 through 2018-2019 period of the study. The fall combined aggregated averages for all items spanned a range from 1.76 (Item 3, Includes creative, unique, and/or new thoughts and ideas) to 2.01 (Item 5, Has a beginning, middle, and end). The spring combined aggregated average for this same period was 2.29, or an increase of .41 points (18%). All items on the assessment experienced gains and all combined aggregated averages were above the two point level with a range of spring averages spanning 2.40 (Item 5, Has a beginning, middle, and end), to 2.21 each (Item 3, Includes creative, unique and/or new thoughts and ideas and Item 6, Applies proper grammar, spelling, punctuation, and capitalization).

Under the general category of Ideas and Content, three criteria were identified. For Criterion 1 (Utilizes arts vocabulary) and Criterion 3 (Includes creative, unique and/or new thoughts and ideas) both produced gains of .45 points (20%) between the fall and spring measurements, which were the largest gains among criteria assessed on students' writing samples. For Criterion 2 (Demonstrates understanding of the arts activity) a gain of .38 points (16%) was produced between the fall and spring measurements for this item.

Under the second general category of Organization, Criterion 5 (Has a beginning, middle, and end) produced a gain of .37 points (16%) from the fall to spring measurement. Of all criteria examined on this assessment, this criterion produced the lowest amount of improvement. Criterion 4 (Expresses ideas in complete sentences) produced a gain of .38 points (16%) between the fall and spring measurements. These findings suggest that PACE students are making modest gains in organizing their written responses on writing prompts provided. It should be noted that the organization of written responses requires levels of higher order thinking that elementary students may not yet possess at the lower grade levels of the elementary school. Tracking of students' development related to this category of criteria as they progress through the elementary grades may provide more clear insights into the developmental trajectory of this construct over time.

The third and final category of writing criteria measured Writing Conventions. A single criterion was identified for this category. Item 6 (Applies proper grammar, spelling, punctuation, and capitalization) used to assess students' writing samples produced a gain of .44 points (20%) for this item from the fall to spring measurements. This item includes multiple

focuses related to an assortment of writing conventions including grammar, spelling, punctuation and capitalization. Data were not collected for each of these individual conventions. It is possible that students' development in the use of each of these conventions may vary with some conventions producing higher or lower performances for each of them. It also must be stated that although arts educators generally include reading, writing, speaking, and other Language Arts activities in their arts classrooms, arts educators are not generally trained in instructional methodology or other pedagogical elements in Language Arts instruction. As a result, students' writing performances may or may not be directly influenced by art educators' classroom instruction. It is, however, noteworthy, that students' performances under this assessment category included improvements in students' demonstrations of the identified writing conventions.

These combined findings are encouraging and suggest that continuing participation in the PACE program through arts education and literacy integration has produced acceptable levels of increases in writing about arts experiences and learning. Increases in aggregated average scores for the Student Writing Sample Assessment were produced at all schools.

Findings from this assessment suggest that over time, continuing study of the PACE program and its focus on using Language Arts as a means to better understand students' learning in the arts may provide conclusive evidence of a positive long-term relationship between the PACE program and arts literacy development among children. Findings for these assessments provide some intriguing evidence that there may be positive relationships between literacy development and the arts literacy development. However, conclusive

evidence of this possibility cannot be supported by the data at this time. It must be acknowledged that some of the scores on student writing samples represented minimal gains; however, the fact remains that increases were produced on all items. Furthermore, sample sizes and the limited numbers of schools and classrooms that participated in the PACE program does not provide conclusive evidence for the generalization that the PACE program or arts instruction generally, contributes to Language Arts development or that linking Language Arts to arts education contributes to learning in the arts. More extensive testing of these hypotheses is required before irrefutable conclusions can be made about whether the PACE program positively contributes to Language Arts development and arts literacy development.

### Student Attitudes Survey

Lifelong engagement with the arts, to a large degree, is influenced by attitudes individuals hold toward the arts. It has been suggested that formation of positive attitudes about the arts begins in the earliest stages of cognitive and artistic development of children (Eisner, 2002; Jensen, 2001; Sabol, 2013). Attitudes formed during this time tend to provide students with motivation to continue learning and engagement in the arts while in school, which may lead to ongoing involvement with the arts throughout adulthood. For this reason, the PACE program chose to measure the development of students' attitudes about the arts as one of its focuses.

The assessment of student attitudes was conducted during the 2015-2016 academic year. Following that assessment, an administrative decision was made to discontinue this assessment in an attempt to decrease the workloads of the teaching artists and arts educators

in PACE programs. This decision was revisited in the spring of 2017, because of the importance attitudes about the arts plays in lifelong engagement with the arts. As a result, the assessment of student attitudes was re-introduced during the 2017-2018 academic year and also for the 2018-2019 academic year. To date only three years of data have been collected about the development of student attitudes toward the arts while in the PACE program. An instrument, Assessment E. *Student Attitude During Arts Activities*, was created for the purpose of measuring student attitudes. The instrument contained three items, one of each focused on the attributes of Engagement, Self Esteem/Confidence, and Communication/Interaction. A rubric, that included qualitative descriptions of each of these attributes on a three-point scale, was provided for use by evaluating teaching artists and art educators in the study (See Appendix G). They evaluated each student's attitudes as demonstrated by the student during arts activities. The assessment was done in the fall and spring semesters. A total of 940 students were assessed over the three-year period the assessment was conducted years.

Students' combined aggregated average attitude scores from the three samples improved from 2.13 on the fall assessments to 2.50 on the spring assessments for an increase of .37 points (15%) for all three items. Th

is finding suggests that, as a group, students involved in the PACE program are acquiring positive attitudes about their involvement with the arts related to the three attributes measured on the instrument. Students' attitudes about Engagement and Self Esteem improved by .37 points each (15%) from the fall to spring assessments. Students' attitudes related to their Communication and Interaction during arts activities increased by .35 points (14%) from the fall

to spring assessments. These results suggest that students' attitudes have improved over time and for all three attitude attributes assessed.

Variation in the degree of improvement exists among students' attitudes in each of the arts disciplines. Based on three years of measurements of students' attitudes, visual arts with 346 students, produced the highest combined increase with .38 points (15%), followed by theatre, with 277 students, produced a combined increase of .15 points (8%), and dance with 399 students, produced an increase of .15 points (6%). Music with 39 students, was added in 2018-2019. Based on this single measurement, music increased by .39 points (17%). Subsequent assessment data for attitude development will be tracked for music for two additional years.

This assessment was dependent upon teaching arts' and art educators' assessment of individual student's demonstrated attitudes during their engagement in arts learning experiences and activities. Although this is an acceptable method for determining students' apparent attitudes, inaccuracies or misinterpretations by evaluators of students' actions or behaviors as expressions of their attitudes are highly possible when using this methodology. It may be more informative and accurate to permit students to express their own qualitative evaluations of their attitudes. Perhaps the *PACE Student Attitude Assessment* instrument could be expanded to include a number of Likert-style items focused on student attitudes and how they relate to their involvement in the PACE program. These items could be completed by students during the fall and spring semesters. Findings from such an expansion of the measurement of student attitudes holds potential for providing more in-depth understanding

of children's attitude about their engagement with the PACE program, their engagement with the arts in general, and their attitude formation about the arts over time. In addition, such a measurement could enhance students' metacognition about their attitudes toward experiences with the arts and lead to establishing a long-term practice of heightened awareness about their attitudes about the arts over time. Developing such an awareness in PACE students could potentially fuel ongoing development of positive attitudes toward the arts as they progress through adult life.

With additional data collection more clear indications of the growth of student attitudes about the arts may be possible. Additional study of factors that may influence attitude formation should be considered. Access to arts education, length of instructional periods, arts instructional activity selection, instructional feedback to students, peer discussions about the arts, parental attitudes toward the arts, and various other factors may combine to influence the maintenance and growth of attitudes toward the arts over time in students. Such studies may provide insights for creating curriculum specifically focused on development of positive attitudes about the arts in the general fields in arts education. At this point, it appears as if the PACE program has created positive attitudes about the arts and engagement with the arts in PACE students. It also has laid a solid foundation for creating positive attitudes about the arts and engagement with them, as well as for developing and sustaining these positive attitudes over time.

### Two More Things

On nearly all assessments, the degrees of improvements for the 2018-2019 assessments were slightly lower than the results from the previous three years. Combined aggregated scores from 2017-2018, which represented the third year for the PACE program, were typically at higher levels than those from 2018-2019. In reviewing the data, it appears as if some of the lower scores from 2018-2019 have been influenced by the addition of two new schools into the PACE program for this academic year. Second grade students in music at Kendall Elementary School and third grade students in theatre at IPS School 51 were participating in the PACE program in their initial year. Both of these school were added to the PACE program during the 2018-2019 academic school year. In previous years, student learning in theatre was measured in PACE. With the addition of Kendall Elementary in 2018-2019, music education became part of the PACE program for the first time. Because Kendall Elementary and IPS, School 51 are in their first year of the PACE program, scores from these schools represent base-line scores for these schools and are at comparable levels produced by other participating schools during their first year of participation in the PACE program. These schools (Pine, Madison, McKinley, Meadows) completed their three-year funded commitment to the PACE program in 2017-2018. Scores from assessments at these schools produced increases over the three year period of their involvement in the PACE program. Similar improving results were produced by South Wayne and Van Buren through the academic years from 2016-2017 to 2018-2019, which represents the three year period of involvement in the PACE program for those two schools. Assessment scores from Kendall and IPS, School 51 will be tracked for the next two years in

order to determine how they may be influenced by instruction in the PACE program and their overall impact on the combined aggregated assessment results for all disciplines in the PACE program. It is of special note to report that although some of the fall scores were lowest from Kendall or IPS, School 51, some of the largest improvement in fall to spring assessment scores also were produced at those schools.

Preliminary suggestions that student retention of arts learning in the PACE program are evident in a number of assessments. All of the PACE assessments included fall and spring measurements. Over the four-year course of the study, and on a number of assessments, the average fall (pre-test) scores were higher than average scores from the previous spring (post-test). This occurred with some degree of regularity on the PACE assessments and within PACE schools. Higher fall scores than the previous spring scores suggests that PACE students may be retaining arts learning from year to year. Comparisons of fall assessment scores from Kendall Elementary School and IPS, School 51 will be compared to previous fall scores to determine if retention of learning is evident in those schools as demonstrated by increases in fall scores on assessments from year to year for the remaining two years of their involvement in PACE. Longitudinal study of all students' retention of arts learning may reveal additional factors that can contribute to retention of arts learning in the form of effective teaching methodologies, articulated curriculum, and performance-based assessments needed that support long term acquisition of knowledge and learning in the arts.

## CONCLUSION

**T**he arts have been a part of the development of humankind since the earliest of times. The role the arts play in the daily lives of all people cannot be ignored or denied. In order to understand and meaningfully participate the increasingly complex nature of the world, an education in the arts is more vital and important than at any time in human history. Living in the contemporary age demands that all people be educated in the uses of skills and thinking processes the arts are based upon and promote. The arts provide the essential links to what makes people human. The arts provide the common language that transcends time, space, class, and culture. The arts are at the center of what makes human being who we are.

In order to fully utilize the benefits of the arts in understanding our place in the world and to support our contributions to it, a comprehensive education in the arts is essential. Such an education not only leads to benefits for all humankind, but perhaps more importantly an education in the arts provides the tools and habits of mind that provide meaning and substance in the lives of every person that benefits from having received a balanced education that includes the arts.

The PACE program has provided glimpses of what a focused education in the arts could provide for learners over time. Findings from the four-year study of the impact the PACE program is having on students' learning demonstrated clear growth and a positive impact on

the overall development of the arts education and attitudes of young people involved in the program. Although the levels of growth were modest in some cases, nonetheless, they were consistently positive and suggest that the PACE program is moving toward accomplishing its goals and the vision created for the program. Comparisons of findings from the 2015-2016, 2016-2017, 2017-2018, and 2018-2019 PACE program provide an emerging and intriguing portrait of how the PACE program is providing consistent growth and advancement of students' knowledge and skills in the arts. Based on these conclusions, continuation of the program, further development of it, and maintaining ongoing support for it, holds undeniable potential for enhancing the development of a comprehensively educated population in Indiana that is highly literate in the arts.

Moreover, the PACE program is ideally positioned to contribute to the artistic literacy development of students engaged in the program. It is widely known that providing a comprehensive education that includes all of its varied forms and the full array of disciplines, contributes to developing positive attitudes, instilling knowledge and skills, and creating capacities of students that persist into adulthood, when provided during the earliest stages of children's development and education. This outcome is being pursued through the PACE program. With expansion and development of the PACE program, the Indiana Arts Commission will position itself as an institution that has enabled the citizens of Indiana to pursue their individual potentials and to enjoy aspects of their lives and occupations that the arts capture, celebrate, and preserve for all time and for all people.

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## APPENDICES

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## Appendix A: PACE Program Description



### PACE

#### Partnering Arts, Communities and Education

### Program Description

PACE was developed to assist elementary schools and artists/arts organizations in establishing long-term, in-depth, and sustainable partnerships for the purpose of impacting student growth and achievement through extended and connected arts and literacy experiences. Qualified applicants will be asked to develop a balanced and effective partnership plan and implement the program with the intention to continue and expand the initiative in successive academic years.

### Expectations

Arts experiences should be planned to occur at frequent and regular intervals throughout the entire school year, align with the academic curriculum, and include related classroom literacy activities both preceding and following each arts experience.

The program should include necessary and appropriate initial and ongoing teacher and artist professional development.

Family and community awareness and engagement is an important component of the program, as is increased student community understanding and involvement.

Annual end-of-year reports will indicate program progress and fulfillment. Student success will be measured by an evaluation process formulated for use in all participating partnerships and as a means of data collection and analysis.

## Eligibility

Proposals for partnerships will be reviewed for acceptance and funding by an advisory committee comprised of representatives from both the educational and arts communities. Either a 501c3 arts organization or eligible school may submit the proposal.

Current eligible schools will be:

- Indiana elementary public, private, parochial, or charter schools
- Schools performing below the state average passing rate on the most recent state standardized assessments in English/Language Arts and Math and having a Free/Reduced Meal rate above 55%
- Representative of urban, rural, and underserved populations

Programs should not be continuations or expansions of existing partnerships but may include schools that have had limited arts experiences outside of the regular arts classroom.

## Appendix B: Procedures for Creating a Sample Group for Assessment



### 3. PROCEDURES FOR CREATING A SAMPLE GROUP FOR ASSESSMENT

Would you like to only do assessments for some of the group instead of all?

We can do that, but....it will be a little complex.

#### A few key items:

- The sample will be selected by pulling representatives from high, medium, and low achieving categories (speaking in 'traditional academic measures')
- We will need 3 students minimum from each of these groups – 9 students total (minimum)
- AND we will need 51% of the students - more than half. May be up to 15 students.
- 51% of students in each class OR 9 students, whichever is the bigger number

#### Now, how will we identify the sample high, medium, low?

- Using the assessments we're already giving – Use the writing sample as a benchmark
- Give the writing sample to all students and use rubric for all writing samples

- Sort by score total on writing sample rubric – Low=6-11, Medium=12-17,  
High=18-24
  
- Triangulate with the teacher’s assessment of the students using new tool –  
“teacher sample group identification tool”
  
- Select the sample group (9 students or 51%) from those who meet the criteria  
on both writing sample and teacher tool. Continue with the rest of the  
assessments with only these students.

## Appendix C: PACE Student Survey, Assessment A. B.

### **B.1.1 PACE Student Survey Questions, Grade 1**

*(Survey is to be given two times during year by artist or teacher. Questions are delivered orally and students mark answer page of emoticons.)*

1. I like to (make art, dance, make music, act like someone or something else).
2. I want to learn more about (art/art making, dance/dancing, music/making music, theatre/acting).
3. I think learning about (art/making art, dance/dancing, music/making music, theatre/acting) is an important part of school.

**B. 1.2.**  
**PACE**  
**Student**  
**Survey**  
**Responses,**  
**Grade 1**

	3 Totally agree	2 Agree	1 Not really
1			
2			
3			

Date \_\_\_\_\_

Student \_\_\_\_\_

**B. 2. PACE Student Survey Responses, Grade 2-5**

Date \_\_\_\_\_

Name \_\_\_\_\_

Place a check mark (  ) in the box for your answer.

	Totally agree (4)	Agree (3)	Not really (1)
1. I like to (make art, dance, music, act like someone or something else).			
2. I want to learn more about (art, dance, music, acting).			
3. I think learning about (art/making art, dance/dancing, music/making music, theatre/acting) is an important part of school.			

## Appendix D: PACE Student Knowledge and Vocabulary Survey, Assessment C

**C1. Dance - Student name/number** \_\_\_\_\_

**Date** \_\_\_\_\_

	Question	My answer	Score (0-2)		
<b>1</b>	Describe some different kinds of dance.				
<b>2</b>	Where could you go to see dancers?				
<b>3</b>	Do people dance just for enjoyment, or can dancing also be a job to earn money?				
	<b>Give the meaning of these dance words:</b>	<b>My answer</b>	<b>Score (0-2)</b>		
<b>4</b>					
<b>5</b>					
<b>6</b>					
<b>7</b>					
<b>8</b>					

C2. Music - Student name/number \_\_\_\_\_

Date \_\_\_\_\_

	Question	My answer	Score (0-2)		
1	Describe some different kinds of music.				
2	Where could you go to hear music?				
3	Do people make music just for enjoyment, or can making music also be a job to earn money?				
	<b>Give the meaning of these music words:</b>	<b>My answer</b>	<b>Score (0-2)</b>		
4					
5					
6					
7					
8					

Total score \_\_\_\_\_

Total score \_\_\_\_\_

C3.Theatre - Student name/number \_\_\_\_\_

Date \_\_\_\_\_

	Question	My answer	Score (0-2)		
1	Describe some different kinds of theatre.				
2	Where could you go to see theatre?				
3	Is theatre just for enjoyment, or can acting and theatre work also be a job for people to earn money?				
	Give the meaning of these theatre words:	My answer	Score (0-2)		
4					
5					
6					
7					
8					

Total score \_\_\_\_\_

**C4. Visual Arts - Student name/number** \_\_\_\_\_

Date \_\_\_\_\_

	Question	My answer	Score (0-2)		
1	Describe some different kinds of art.				
2	Where could you go to see artwork?				
3	Do people make art just for enjoyment, or can making art also be a job to earn money?				
	Give the meaning of these art words:	My answer	Score (0-2)		
4					
5					
6					
7					
8					

Total score \_\_\_\_\_

## Appendix E: PACE Artist Assessment of Individual Student Skills, Assessment D

### **D. 1. PACE Artist Assessment of Individual Student Skills: Skills 1, 2, and 3**

Date \_\_\_\_\_

Student name/number \_\_\_\_\_

Scores: 1<sup>st</sup> Assessment \_\_\_\_\_ 2<sup>nd</sup> Assessment \_\_\_\_\_ 3<sup>rd</sup> Assessment \_\_\_\_\_

	Skill Levels Applied to Any Discipline	Minimal (1)	Developing (2)	Advanced (3)
1.	Basic level of demonstrated student skill in the art discipline			
2.	Demonstration of effective application of practices, tools, or materials in the creative process for the art discipline			
3.	Understanding and application of the sequence/process for creating an activity or work in the art discipline			
	Discipline Specific Skills Determined by Artist	Minimal (1)	Developing (2)	Advanced (3)
4.				
5.				
6.				

**Comments (optional):** Use this space to indicate factors that could affect the individual student performance in comparison to the overall group (if known) such as supplemental instruction in the art form, private or advanced training in the art form, high rate of absence, enrollment in school later in the year, identified learning or physical challenges, etc.

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## Appendix F: PACE Student Writing Samples Prompts and Rubric, Assessment E

### **E. 1. Possible Prompts/Guiding Questions for Student Writing Samples Following Arts Activities**

*(One of the questions below could be used for a single writing sample, or the artist may have a definite topic or writing prompt they would like students to address. There should be a specific prompt for each of the three writing samples.)*

Did you enjoy the activity? Why? Why not?

What did you learn?

What more would you like to know?

What happened during the activity?

Would you like to do it again? Why? Why not?

Was the activity easy? Why? Why not?

Do you like to work alone or in a group? Why?

Describe what you made or did during the activity.

If you performed something, describe what you did.

Describe what you did at the beginning, middle and end of the activity.

How did you feel during the activity, and what made you feel that way? Explain.

**E. 2. PACE Student Writing Sample Assessment Rubric**

Date \_\_\_\_\_

Student name/number \_\_\_\_\_ 1<sup>st</sup> Sample \_\_\_ 2<sup>nd</sup> Sample \_\_\_ 3<sup>rd</sup> Sample \_\_\_

Criteria	Strong—4	Very Good—3	Average—2	Minimal—1
<b>Ideas and Content</b>	1. Always utilizes arts vocabulary appropriately	1. Usually utilizes arts vocabulary appropriately	1. Occasionally utilizes arts vocabulary	1. Rarely utilizes arts vocabulary
	2. Always demonstrates outstanding level of understanding of arts activity	2. Usually demonstrates high level of understanding of arts activity	2. Occasionally demonstrates some level of understanding of arts activity	2. Rarely demonstrates understanding of arts activity
	3. Always includes creative, unique and/or new thoughts and ideas	3. Usually includes creative, unique and/or new thoughts and ideas	3. Occasionally includes creative, unique and/or new thoughts and ideas	3. Rarely expresses creative, unique, and/or new thoughts and ideas
<b>Organization</b>	4. Always expresses ideas in complete sentences	4. Usually expresses ideas in complete sentences	4. Occasionally tries to express ideas in complete sentences	4. Rarely uses short phrases and complete sentences
	5. Always has well-defined beginning, middle, and end	5. Usually beginning, middle, and end are evident	5. Occasionally beginning, middle, and end are evident.	5. Rarely are beginning, middle, and end evident
<b>Writing Conventions</b>	6. Always applies proper grammar, punctuation, spelling and capitalization	6. Usually applies proper grammar, punctuation, spelling and capitalization	6. Occasionally grammar, punctuation, spelling and capitalization are adequate	5. Rarely are grammar, punctuation, spelling and capitalization used

## Appendix G: PACE Student Attitudes During Arts Activities, Assessment F

### **F. PACE Student Attitude During Arts Activities Assessment**

Student Attitude	Strong evidence—3	Sufficient evidence—2	Limited evidence—1
<b>Engagement</b>	Student consistently demonstrates a high level of attention, interest, and curiosity during arts activities and high levels of motivation and perseverance in carrying out the activity.	Student usually demonstrates attention, interest, and curiosity during arts experiences and adequately demonstrates perseverance in carrying out the activity.	Student rarely demonstrates attention, interest and curiosity during arts activities and is often inattentive and lacks motivation and perseverance in carrying out the activity.
<b>Self Esteem/ Confidence</b>	Student consistently demonstrates a high levels of self-esteem and confidence during arts experiences.	Student usually demonstrates adequate levels of self-esteem and confidence during arts experiences.	Student rarely demonstrates a sense of self-esteem and confidence during arts experiences.
<b>Communication/ Interaction</b>	Student consistently demonstrates high levels of communication and interaction with the artist and classmates and expresses thoughts and ideas freely and with clarity.	Student usually demonstrates appropriate levels of communication and interaction with the artist and classmates and adequately expresses thoughts and ideas.	Student rarely demonstrates communication and interaction with the artist and classmates and rarely expresses thoughts and ideas.

