Evaluating Educational Outreach:

Awareness Building within the Houston Metropolis

Asia Society Texas

Emmanuella M Aina, Richard Guo, George T Johnson, Wai C Lei, Emilee A Nelson

August 16, 2024

Introduction

Bridging cultures and building a communal understanding of diverse perspectives starts with–and is enhanced by–students and educators. Such a mission is accomplished through educating, engaging, and entertaining via thought-provoking experiences from different countries, cultures, points of view, and art forms. Asia Society Texas (AST), an organization which enhances the understanding of Asia and its diverse culture through exhibition and educational programs, reported on a survey conducted by the National Commission on Asia in schools which revealed an impressive gap in resources available for teaching and learning about Asia and Asian Americans in K-12 education (Kapral, 2024). In order to begin addressing this fundamental resource shortfall, AST made it their priority to provide curated resources including onsite tours and field trips of the permanent *Explore Asia* (EA) exhibition in addition to existing resources in the new *Asia in the Classroom* initiative. These newly developed programs have yet to accurately measure their short and long-term social and economic impact due to the current absence of implementing a refined data collection and analysis protocol.

AST expressed their goals of analyzing their existing datasets and revising the current *Explore Asia*'s feedback system which is housed within four datasets that are managed by their team members. Three of the datasets contain their exhibition attendance, membership information, monthly ticket revenue data, documentation of various programs hosted by the facility, and finally, reports of school tour demographics. The fourth dataset contains current and historical questionnaire responses by their visitors and members to enhance the program's viability. There is a need for the development of evaluation metrics geared towards analyzing and visualizing anticipated short and long-term institutional performance. For instance, there is a desire for the program to advance local tourism as well as broaden inclusivity and accessibility of the offered initiatives at AST.

We have adapted previously established international standard key metrics to align with AST's mission, goals, and fiscal objectives. The dimensions of these performance indicators focus on the audience and visit numbers, accessibility and equity, and engagement of uninvolved communities. These key metrics or performance indicators have been transformed into refined member survey questions to develop performance benchmarks which will subsequently facilitate both a basis for sustainable development and future data collection tactics. We curated and presented an incoming versus outgoing feedback system as an additional request. Recommendations have also been made for future educational outreach endeavors in the Greater Houston area.

Program Characteristics

The first of its kind in Texas, the *Explore Asia* exhibition created by AST guides students on an immersive, interactive, and multisensory experience. Content and materials are tied to state learning standards of art, culture, and global humanities topics. This exhibition features five countries from Asia: China, India, Japan, South Korea, and Vietnam. Six interactive destinations consist of an orientation hall, culinary station, theater for interactive drumming performance, explorer stations for hands-on engagement, train ride of historical sites, and the Mist of Intentions to reflect on shared humanity. Rotating exhibitions at the Louisa Stude Sarofim Gallery (LSSG) offer unique perspectives through art from around the world, and Texas possesses one of the three physical Asia Society landmarks. The new *Asia in the Classroom* learning platform comprises online graphic novels to engage students with compelling TEKS-aligned narratives in addition to an educator portal with lesson guides designed for K-16 classrooms. World-renowned Japanese architect Yoshio Taniguchi designed the center as an art piece itself to embody both Western and Japanese design. However, the twenty-first century poses challenges to museums and other similar educational facilities such as AST. As indicated by Kelly (2004, 47), these challenges include decreasing attendances worldwide due to increased competition, a proliferation of leisure choices for a more sophisticated and demanding consumer, decreasing budgets and limited resources, and the need to respond to a range of pressing social and environmental issues.

In regards to clientele, students (K-12) and educators of the Houston MSA are the target of the exhibition. Despite this focus, the program also encourages the general public (inclusive of all age-ranges) to participate in the hosted educational events. All demographic groups and income levels are encouraged to participate in these events as well despite the set cost and location of the exhibit. Services that AST provides creates an opportunity to expand common knowledge about Asia and fosters a healthy learning environment that has been previously unavailable to many citizens.

Demographic Analysis

The current data provided by Asia Society Texas was analyzed alongside Houston's demographic data to identify gaps in outreach and develop recommendations for extending engagement efforts. Using the U.S. Census Bureau, we obtained spatial data at the block group level on two key datasets: total population by race and total population enrolled in school. Utilizing GIS software, we created visual representations showing the locations of all past school tours to AST, as well as the population density of AST's target demographics: K-12 students and the Asian population in Houston.

Three maps were generated to pinpoint engagement and outreach gaps, two of which can be found in Appendix D. As shown below, Map 1 illustrates both the locations of past school tours and the number of attendees from each location. The results indicate that school tours frequently originated either from the west side of the 610 Loop or within the 610 Loop, with notable concentrations in neighborhoods such as Sharpstown and Cypress. Figure D.1 highlights the concentration of the Asian population, primarily located in West Houston along the Westpark Tollway. We see that participating schools are typically from locations with higher Asian density which indicates a possible correlation. Not shown in this map are the Katy, Richmond, and Sugar Land areas which all have significant Asian population density with little to no school tour participants.

Figure D.2 shows the distribution of K-12 students, with most students concentrated in West Houston, along with additional pockets in Cloverleaf and Cypress.

When both Figure D.1 and D.2 are studied alongside one another, it becomes clear that the Asia Society of Texas has successfully engaged schools in target population regions, as evidenced by the frequent school tours from these areas. However, as previously stated, there are notable gaps in outreach in other areas with substantial Asian populations such as the Alief and Fort Bend communities. These districts are involved in limited school tour activity despite possessing the desired high density of the target demographics and overall population diversity. Expanding outreach efforts to these areas could significantly increase the participation level of the program's target population and engage the most diverse regions of Houston.



Map 1 - Locations of Tours Conducted

Survey Analysis

Outgoing visitors of all ages were prompted to submit their feedback on the *Explore Asia* exhibition by answering five multiple choice and two open-ended questions. The goal of the provided survey is to determine if the *Explore Asia* program affected individual knowledge about Asian culture.

Attendees or clientele possess unique identities correlated to their incoming knowledge about Asia. Knowledge levels were established at five tiers: no knowledge, little knowledge, some knowledge, a lot of knowledge, and expert knowledge. Attendees were thus requested to rank their knowledge about Asia before visiting the *Explore Asia* program.

Number of Responses



Figure 1 - Initial Knowledge Responses from EA Survey.

There are 649 current survey responses available for analysis. As displayed by Figure 1, 46.5% of responses indicated "some knowledge" while only 9.8% and 6.8% of responses indicated "no" and "expert" levels respectively. Little knowledge and a lot of knowledge responses differ only by approximately 4% in total.



Figure 2 - EA Effectiveness Response from EA Survey

Attendees were then prompted to reflect on their departing knowledge level through a simple "yes" or "no" multiple choice question. As reflected in Figure 2, most visitors (~92%, 595 responses out of 650 total) indicated that their visit to the program increased their knowledge about Asian culture.

Participants were requested to present their vote on which exhibit feature was the best through one of the two free response questions. Out of 472 filtered responses, 175 individuals indicated that the drumming activity was their favorite while 130 individuals indicated that the bullet train activity was their favorite. The art exhibit is the third most popular activity with only 55 votes. Other activities such as food, the sniff station, and performances yielded between 5 to 35 votes each.

A separate survey was presented to educational officials to assign participating groups classifications based on their education level, school type, and school district. School tours were then prompted to indicate whether or not they receive federal funding from the Title 1 program with 32.8% of respondents reporting "yes." Such a result indicates that providing financial support or introducing third-party financial programs may be beneficial in improving outreach efforts. School-type frequencies were designated by three options: charter, private, and public. The majority (56.7%) of the attending schools were classified as public while 29.9% were private and 13.4% were charter.

Key Performance Indicators

Exhibition efficiency is measured by a preset of key performance indicators (KPI). For instance, Asia Society Texas set each benchmark for FY24 to align with a 15% improvement from previous year results. This FY24 progress is shown in figures from Appendix A. We assessed the following KPI's to identify AST's metrics towards growth and assist with future goal setting initiatives.

The first KPI is attendance as displayed in Table 1.1. AST has documented 84,541 total attendees for the 2024 fiscal year. It is important to note that this total excludes the months of May and June due to third-party data delays at the time of this study. An additional 14,059 attendees are required to meet the annual goal of 98,600 total attendees, a currently underperforming but feasible outcome given a monthly average of 8,546 visitors. Fluctuations in attendance are dependent on the rotating seasonal exhibits such as LSSG which rotates exquisite artwork as proven in the figures located in Appendix B. Seasonal cultural celebrations are also responsible for an increase in visits to AST. Onsite programs and rentals comprise 34.4% of attendees while the permanent programs only comprise a total of 21.5% when combined. The remaining 44.1% of attendees visit the building without participating in the offered exhibitions. As indicated by Figure A.1, all attendance rates are on track to meet the FY24 benchmark.

The second KPI is the amount of membership sales as displayed in Table 1.2 and Figure C.3. Paid totals include tiered memberships: discounted, household, individual, and premium. Grand totals include paid totals in addition to student and corporate-comped memberships. Current goals for membership include 740 paid memberships and 880 grand total memberships. Monthly membership averages have increased by 11.4% when compared to the 2023 fiscal year. Current results for membership indicate 507 paid memberships and 125 comped memberships for a grand total of 632 memberships. Only 72.27% of the current fiscal year membership goal

has been attained. The year-to-date monthly average of 89.5 memberships would generate an additional 179 memberships if achieved, indicating that 69 additional memberships would be required to reach the stated goal. As an overview, total AST membership sales have exceeded the FY24 benchmark which has been depicted in Figure A.3.

The third and final KPI is the revenue generated from AST exhibitions as displayed in Table 1.3. Details about donations are included in <u>the publicly provided financial statements</u>. Current goals for ticket revenue generation is to receive \$32,785 annually. To date, only \$19,346, or 59% of this goal has been generated. According to the monthly average, \$3,870 is anticipated to be generated in May and June alone which would indicate 70.8% of the fiscal goal. AST would require an additional \$9,569 to reach their goal. These numbers indicate that, as visualized in Figure A.2, AST revenue is currently underperforming (given the exception of the generation created by the LSSG gallery). Under the consideration that EA is a first year program for AST, being able to accomplish this set revenue goal may require additional marketing and resource investment in the near future.

Attendance	Building	LSSG	Explore Asia	Programs
July	3902	271	3067	841
August	2167	1174	535	1,455
September	2637	1242	1815	2,069
October	3101	841	524	2,587
November	11517	1783	2284	11043
December	1052	444	389	621
6 month total	24376	5755	8614	18,616
January	1270	408	248	971
February	6201	599	289	5889
March	2268	764	481	994
April	3150	725	278	2645
6 month total	12889	2496	1296	10499
Yearly Total	37265	8251	9910	29,115

Table 1.1 Asia Society's Attendance

Memberships	Discounted	Household	Individual	Premium	Student	Corporate
July	9	10	6	3	9	6
August	34	16	18	8	7	19
September	28	7	15	5	11	23
October	19	17	13	3	4	11
November	10	13	11	8	7	0
December	15	15	11	8	6	22
6 month total	115	78	74	35	44	81
January	37	29	21	4	6	30
February	25	26	21	10	17	29
March	20	26	16	12	21	11
April	17	15	19	6	3	47
May						
June						
6 month total	99	96	77	32	47	117
Yearly Total	214	174	151	67	91	198

Table 1.2 Asia Society's Memberships

Revenue	Explore Asia	LSSG	
July	\$2,177	\$397	
August	\$1,873	\$516	
September	\$3,266	\$290	
October	\$1,060	\$1,484	
November	\$1,695	\$474	
December	\$530	\$531	
6 month total	\$10,601	\$3,692	
January	\$970	\$768	
February	\$795	\$134	
March	\$677	\$773	
April	\$337	\$599	
6 month total	\$2,779	\$2,274	

Table 1.3 Asia Society's Ticket Revenue

Discussion

The current dataset analysis revealed that the EA exhibition is an effective educational tool for all ages and knowledge levels. Shared aspects or cultural commonalities of the differing cultures were highlighted through an open-ended free response survey question. Many visitors also expressed curiosity and a desire to continue their learning about Asia, indicating that the program successfully sparked individual interest. Attendance and annual membership totals are anticipated to align with the goal of achieving 15% growth.

Our developed set of key performance indicators provides a good basis for sustainable program development. This result is secondary to the quality of the updated feedback system. Analyzing the number of visitors gives a glimpse into the viability and overall engagement of the two main programs. Notable spikes in attendance for the months of November and February as seen by Figure B.1 are likely a result of popular seasonal programs such as the Night Market Carnival in November and Lunar New Year event in February. In addition, the Thanksgiving holiday season in November and Lunar New Year celebrations in February may have also contributed to the visualized increase in attendance. EA is by far the most popular program operated by AST as shown in Figure C.1, although it is worth mentioning that FY24 is the first year of EA which may suggest that the high attendance level could be partially attributed to the novelty characteristic of the program. However, overall attendance rates are gradually recovering back to pre-pandemic attendance levels as indicated by Figure E.1 which suggests that the EA program remains a feasible priority for AST. This also suggests that revenue generation will increase accordingly secondary to the fact that annual ticket goals are anticipated to increase in parallel with attendance rates.

As previously mentioned, the EA program is a relatively new part of AST. This suggests that the novelty factor could also be partially responsible for the high ticket revenue displayed in Figure C.2. Additionally, it is important to point out that each EA ticket includes admission to LSSG. Attendees may find EA tickets to be a better value compared to purchasing a standalone LSSG ticket. Otherwise, there is no explanation for the sudden spike in EA revenue in September 2023 as seen in Figure B.2. If successful, upcoming opportunities through the forms of pending financial contracts (6 HISD middle schools, KIPP for district licensing, and donor designation) would generate approximately \$56,000. Such income would surpass the annual goal by approximately \$35,346, indicating a greater level of program success than otherwise calculated. There has been no notable trend in membership sales except for a corporate membership spike in April 2024 which has been visualized in Figure B.3. On a final note, membership signup has remained somewhat stable throughout the course of FY24 with only a minor dip in the months of November and December.

Neighborhoods such as Fort Bend and Alief are areas where engagement and outreach could be improved. Engagement gaps were also identified in Sugar Land, Cloverleaf, Spring Branch, Katy, and the southeastern areas along I-45. It is debatable whether or not these gaps are due to lack of AST outreach, financial barriers, or inadequate contract maintenance.

Program Recommendations

It is difficult to determine the demographic group being excluded from AST's outreach due to absent concrete data points. Acquiring these concrete data points can be achieved by implementing the updated survey questions through the optionally expanded demographic questionnaire. However, our analysis indicates that the Alief suburb is not only one of the most diverse areas, but it is also a great candidate for increased engagement or outreach efforts. Fort Bend County may also be desirable as indicated by their significant Asian population and higher income level.

Engagement of all knowledge levels should be encouraged through more interactive or more personalized experiences as suggested by the distinct interest in the drums and bullet train activities. Furthermore, implementation of the new streamlined feedback system will assist AST in understanding why certain visitors did not feel more knowledgeable after going through the EA exhibition.

Successful programs requiring minimal improvement encompass the cultural camp for children as well as festival events. Suggestions to increase attendance at these events include competitive team activities, limited edition in-person merchandise availability, and more enticing dance program displays as interactive activities have shown to be engaging and memorable for visitors.

If marginal membership revenue growth is desired, AST should consider implementing full price and premium membership benefits to help entice the current discounted and unpaid members into pursuing paid membership status.

To increase attendance, we recommend investing resources into the digital space (specifically social media outlets such as TikTok, Instagram Reels, and YouTube Shorts). Apart from AST's outreach being catered towards education and the younger generation, they have more engagement and enjoyment of the exhibits within the building. This would allow AST to tap into the younger age demographic by showcasing their appealing events and exhibitions. On these social media platforms, beneficial information would be spread not only to children but also their families who would thus become interested and more appropriately acquainted with the organization. Recognizing this underutilized advertising method would allow broader reach and create opportunities to ensure that fiscal growth goals remain feasible.

Appendix A



Attendance: YTD Totals vs FY24 Goals





Figure A.2 - FY24 YTD Ticket Revenue vs. FY24 Ticket Revenue Goal



Figure A.3 - FY24 YTD Membership vs FY24 Membership Goal

Appendix **B**



Figure B.1 - FY24 Monthly Attendance Trend



Figure B.2 - FY24 Monthly Ticket Revenue Trend



Figure B.3 - FY24 Monthly Membership Trend

Appendix C







Figure C.2 - FY24 Ticket Revenue Distribution



Yearly Total Membership Type Distribution

Figure C.3 - FY24 Membership Distribution

Appendix D



Figure D.1 - Asian Population Density



Figure D.2 - K-12 School Enrollment

Appendix E



Monthly Attendance Comparison Pre and Post Pandemic

Figure E.1 - Monthly and Annual Attendance Comparison Between Pre and Post Pandemic

Bibliography

- Bailey, Stephen, Peter Falconer, Malcolm Foley, Gayle McPherson, and Margaret Graham. 1997.
 "Charging for Admission to Museums and Galleries: Arguments and Evidence." *Museum Management and Curatorship* 16 (4): 355–69.
 https://doi.org/10.1080/09647779700301604.
- Burgard, Karen L. B. 2020. "Constructing Deeper Meaning: A Museum Curriculum Evaluation Framework for Students." *Kappa Delta Pi Record* 56 (2): 58–63. <u>https://doi.org/10.1080/00228958.2020.1729635</u>.
- Cooney, Kate, and Kristen Lynch-Cerullo. 2014. "Measuring the Social Returns of Nonprofits and Social Enterprises: The Promise and Perils of the SROI." *Nonprofit Policy Forum* 5 (2). <u>https://doi.org/10.1515/npf-2014-0017</u>.
- Gonçalves, L C, Pedro Campos, and M B Sousa. 2012. "M-Dimensions." *M-Dimensions: A Framework for Evaluating and Comparing Interactive Installations in Museums*, October. <u>https://doi.org/10.1145/2399016.2399027</u>.

Kapral, Jennifer. "ASIA SOCIETY OF TEXAS." Lecture, June 5, 2024.

- Kelly, Lynda. 2004. "Evaluation, Research and Communities of Practice: Program Evaluation in Museums." Archival Science 4 (1-2): 45–69. <u>https://doi.org/10.1007/s10502-005-6990-x</u>.
- Lin, Yung-Neng. 2012. "International Comparison of National Museum Performance Indicators." *The International Journal of the Inclusive Museum* 4 (1): 57–72. <u>https://doi.org/10.18848/1835-2014/cgp/v04i01/44352</u>.
- Perez, Anthony Daniel, and Charles Hirschman. 2019. "The Changing Racial and Ethnic Composition of the US Population: Emerging American Identities." *Population and Development Review* 35 (1): 1–51. <u>https://doi.org/10.1111/j.1728-4457.2009.00260.x</u>.

- U.S. Census Bureau. 2022. "Race." *American Community Survey 1-year estimates* Table B02001. <u>https://data.census.gov/table/ACSDT5Y2022.B02001</u>.
- U.S. Census Bureau. 2022. "School Enrollment by Level of School for Population 3 Years and Over." *American Community Survey 5-year estimates* Table B14001. <u>https://data.census.gov/table/ACSDT5Y2022.B14001</u>.