



Virtual Observations at Scale: Lessons Learned During a Pandemic Year from Louisiana’s Third Party Observations

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Background

Since the passage of the State of Louisiana’s Act 3 in 2012, the University of Louisiana at Lafayette’s Picard Center for Child Development, has served as a monitoring mechanism for Louisiana’s Early Childhood Education (ECE) accountability system. Throughout the school year, a minimum of 50% of the total number of publicly-funded classrooms (several thousand in total) are observed by third party observers (i.e., observers not affiliated with the setting), using the *Classroom Assessment Scoring System*TM (CLASS[®]) observation tool in at least one prekindergarten (preK), toddler and infant classroom at each site where those ages are served. Local CLASS[®] observations are also conducted in all participating classrooms twice annually, including sometimes by principals or directors. To monitor reliability and validity, third party scores are compared to local observation scores at the classroom level. Aggregate scores are wrapped up to the site level with the Performance/Star Ratings: Excellent/5 Stars (7.0-6.0), High Proficient/4 Stars (5.99-5.25), Proficient/3 Stars (5.24-4.50), Approaching Proficient/2 Stars (4.49-3.75), Approaching Proficient/1 Star (3.74-3.00) or Unsatisfactory/0 Stars (2.99-1.00). The [Performance Profiles](#) are publicly available to parents and caregivers, so they can make informed decisions on the quality and type of care for their young children.

Definitions:

- *Third Party observers* are independent observers selected by the University of Louisiana at Lafayette’s Picard Center for Child Development to conduct CLASS[®] observations in randomly selected classrooms.
 - These observers live in the general area in which they observe in person and they adhere to strict observation protocol guidelines.
- *Local observers* are recruited by the local community networks to conduct fall and spring CLASS[®] observations on 100% of all participating classrooms.
 - Local observers can include but are not limited to principals, directors, early childhood personnel, contracted individuals or teachers, who follow general observation protocol guidelines for conducting CLASS[®] observations.

Introduction

Due to COVID-19, various challenges arose for many states, schools, and early care environments across the country. Despite these challenges, the monitoring of teacher-child interactions in early childhood settings in the state of Louisiana remained an important focal point with sustained efforts to improve the quality of childrens' ECE. During this period, the Picard Center conducted a small pilot study ($n = 16$) to examine the feasibility of a virtual model for CLASS[®] observations conducted in ECE sites across the state of Louisiana. The Louisiana Department of Education (LDOE) provided the Picard Center with a list of 28 ECE sites to contact for voluntary participation in the virtual pilot. Sixteen ECE sites participated in the pilot including 4 infant, 5 toddler, and 7 preK classrooms. The video platform Zoom was used to host the virtual CLASS[®] observations. The Picard Center conducted a test of video-streaming and device capabilities for each ECE site before the scheduled observation (1 to 3 days in advance). During the test, the Picard Center provided the site with guidance on using Zoom to stream video and troubleshoot current issues and advised on potential future issues. The common issues identified during the test included weak wireless networks, audio and video issues (hard to hear teacher with masks, frozen/lagging video and/or audio, positioning of camera, small picture size) and incompatible streaming devices such as laptops with outdated operating systems. Given scheduling a test Zoom with each site was not feasible on a larger scale due to timing and personnel constraints, the Picard Center developed a CLASS[®] virtual observation tutorial video and guidance document with troubleshooting tips. When virtual classrooms went statewide, these were shared by email with sites prior to the scheduled CLASS[®] observation with the links also accessible on the Picard Center website.

The virtual pilot took place from October 2, 2020 through November 9, 2020 with the exception of one rescheduled virtual observation conducted on December 3, 2020. The Picard Center began official 2020-21 in-person CLASS[®] observations on October 19, 2020 following all health and safety protocols established with the guidance of the Louisiana Department of Health (LDH) and the LDOE and continued to monitor the risk level of COVID-19 in the state. Due to the rising numbers of COVID-19 in Louisiana, all in-person CLASS[®] observations were paused on December 3, 2020 and the Picard Center shifted to virtual CLASS[®] observations until March 2021 when some in-person CLASS[®] observations resumed and virtual observations continued. From December through May 2021, the Picard Center conducted over 1,500 virtual CLASS[®] observations.

Implementation

For statewide non-pilot virtual observations, approximately 1 to 5 days in advance, the sites were sent an email with a three-day window for the observation with detailed information outlining the virtual observation process. The already mentioned video tutorial and guidance document provided specific instructions on how sites should prepare for virtual observations with video capture and streaming guidance, troubleshooting tips, and what to expect while conducting the virtual observation. The site was called 1-3 days before the three-day window to schedule the virtual observation. The sites were asked to identify a Site Designee, an individual who would be available the morning of the observation with a primary responsibility of monitoring and adjusting the video-streaming device (tablet, computer, SmartBoard[®], or cell phone, sometimes in a Swivl[®] base) for the CLASS[®] observation. The Picard Center and site administrator agreed

upon an optimal time to begin the virtual observation in the morning when the children were present in the classroom, typically between 8:30 and 10:30 am. Picard Center staff (Virtual Administrators) and Picard Center CLASS[®] observers acted as the Zoom hosts for all virtual observations. In order to maximize the number of observations conducted, each Virtual Administrator oversaw on average 5 observations per day (1 to 7) simultaneously in different breakout rooms. The Virtual Administrator started the main Zoom meeting, moving the individual Site Designees and Picard CLASS[®] observers to the appropriate breakout room before the optimal learning time. The Site Designee and Picard CLASS[®] observer coordinated a way to communicate the start and end time of each cycle. Either the Zoom chat feature or a verbal notification through the video screen was used to flag when the cycle would end and when the next cycle would begin. The Picard CLASS[®] observers ensured their computer microphone was muted, had a timer/stopwatch to time the observation and scoring cycles and wore headphones during the observation with the option of leaving on or turning off their video streaming. The Picard CLASS[®] observers observed for 15 minutes (infant observations) and 20 minutes (preK and toddler observations). After each observation cycle ended, the Site Designee and Picard CLASS[®] observers turned off video and muted their sessions. The Picard CLASS[®] observers scored independently for 10 minutes. For reliability purposes, approximately 15% of virtual observations by two Picard CLASS[®] observers would be coded simultaneously through Zoom.

Clear and consistent communication between Virtual Administrator, Site Designee, and Picard CLASS[®] observers was essential throughout the observation. Picard CLASS[®] observers would notify the Virtual Administrator immediately via text or a phone call if connection was lost at any time during any observation cycle. Among the 15% of dual-coded virtual observations, the observation continued with a minimum of one active observer. The Site Designee would contact the Virtual Administrator immediately via telephone if they were experiencing any technical difficulties. The Virtual Administrator worked with the Site Designee to troubleshoot the issue to continue the observation during the next cycle. If the schedule permitted, an additional cycle would be observed if connection was lost for any of the participants (Picard CLASS[®] observers or Site Designee). If the schedule did not permit, the observation would be concluded and the observer would notify the Picard Center if any of the cycles ended before twenty minutes (fifteen minutes for infant observations) had been observed.

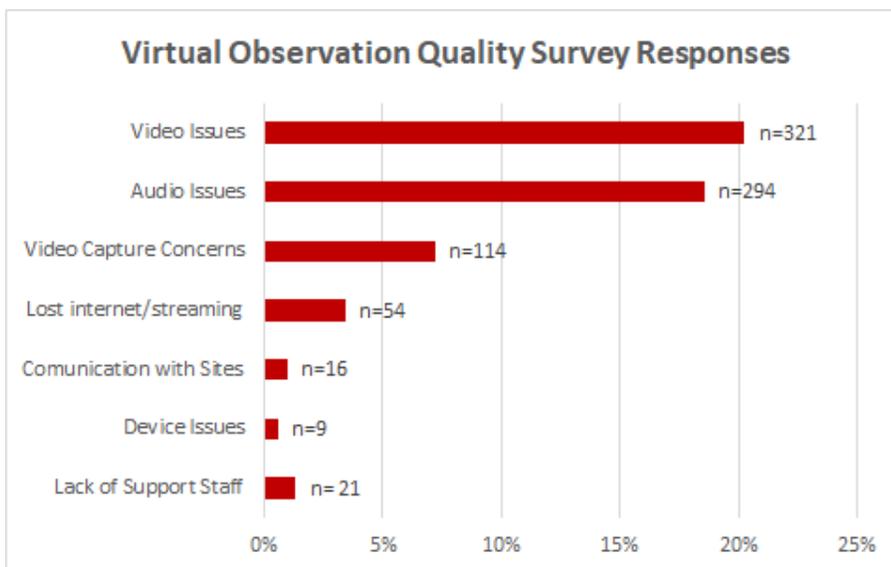
Following each observation, Picard observers completed a virtual observation quality survey. The survey included questions pertaining to audio or video quality issues (brief or sustained), video capture considerations and the overall observation being representative of an ideal observation (see and hear the majority of interactions around the classroom). The purpose of this survey was to screen each virtual observation prior to entering in the observation data into the LDOE's Early Childhood portal for accountability purposes. Observations were excluded when there were persistent video/audio issues, a lack of support staff to monitor and adjust video placement throughout observation, video capture concerns (teacher and/or children not in view) or when four complete cycles of observation could not be collected. If survey responses or comments were not clear, the Picard team consulted with observers to discuss the observation further.

Challenges

Despite the accomplishment of executing and collecting 1,500+ virtual CLASS observations, the effort was challenging. The Picard Center experienced a need for additional personnel and time allocation to communicate, schedule and conduct each virtual observation. Although each virtual observation was scheduled ahead of time, last minute cancellations and changes occurred frequently. The sites encountered their share of challenges such as personnel shortages hampering their appointing a Site Designee (an individual who could assist with the observation for two-hours). In addition, a lack of streaming devices and issues with connectivity and other technical problems were obstacles sites encountered. Observers had their own unique challenges including last minute schedule changes by the site, difficulty communicating with sites during the observation via Zoom chat or voicing over, troubleshooting technical issues, and determining if the overall quality of the video streaming was representative of a ‘typical experience’ in the classroom observed.

The chart more specifically shows the numbers experiencing various problems. Observers selected yes or no if they experienced any video quality issues. A majority, sixty-eight percent (68%, $n = 1,075$) indicated

the observer did not experience any video quality issues during the observation. Of the 526 virtual observations with video quality issues noted on the survey, the most common responses included video issues (lag or frozen video), audio issues (difficult to hear), video capture concerns (video obstruction, teacher and/or children not in full frame, video device too close or too far from



majority of teacher(s) and/or children), loss of internet/streaming connection, communication issues with site, device issues, and lack of support staff to monitor camera/device.

Benefits

The virtual mode of observations allowed a continuation of the LDOE and Picard Center’s efforts to monitor the quality of children’s ECE experiences in the state of Louisiana despite the uncertain times of the COVID-19 pandemic. This method of observation was necessary to protect health and safety by avoiding physical contact between observers and sites. An added benefit of this virtual mode was that some local and third-party observations could occur simultaneously thereby reducing some of the planning and administration efforts of local community networks and sites.

Pilot Inter-Rater Reliability Comparison

Prior to the COVID-19 pandemic, 10% of all third party observations were double coded in person with two observers to monitor inter-rater reliability. Due to COVID-19 restrictions in fall 2020, a large proportion of such reliability observations were conducted virtually with observers simultaneously viewing and coding teacher-child interactions through Zoom. In the spring of 2021, The Picard Center had an opportunity to conduct a small sample of dual observations (n = 11) where a third party in-person observer at the ECE site coded simultaneously with a third party observer coding virtually. The dual observations included 2 infant, 2 toddler, and 5 PreK classrooms at ECE sites. Ten of the eleven (94.2%) dual observations were found to be 80% congruent within one point across the coded CLASS[®] dimensions. The results are a good starting point to design a study that could examine the reliability of virtual observations and determine if virtual observations could be equivalent to in-person observations; however, a larger sample of dual observations is needed. The larger sample could include the comparison of virtual observations in different ECE settings (public PreK classrooms, Head Start, daycare centers) across age types (infant, toddler, PreK) with some classrooms using enhanced technology (microphones, swivels, and cameras) and other classrooms using low-tech or minimal added technology. Additionally, the observers could rotate their observation role as the in-person observer vs. the virtual observer.

Lessons Learned

The Picard Center used the lessons learned from the 2020-21 school year to enhance the preparation and overall quality of virtual observations for the 2021-22 school year by:

- Providing improved guidance to ECE sites and Picard CLASS[®] observers focusing on common issues experienced and various ways to troubleshoot (see [Virtual Observation Protocol](#)).
- Conducting a Practice Zoom prior to the scheduled virtual observation to test the technology capabilities of new sites needing assistance or sites who experienced virtual audio/video issues last school year and have made adjustments to accommodate a virtual observation.
- Emphasizing effective communication between Site Designee and Picard CLASS[®] observers is a key element to the quality of the virtual observations. For virtual observations, the Site Designee serves as the eyes and ears of the observer, who is seen and what is heard during the observation. Observations are successful when:
 - Sites have tested the audio and video capabilities of their devices and connectivity prior to the scheduled observation;
 - A Site Designee is present during the video streaming for approximately 2 hours;
 - The Site Designee is familiar with the classroom schedule;
 - The Site Designee places the camera in a pre-selected location to capture the best angle and sound of teacher(s) and children during whole group activities.
 - For center and individual activities/formats, the Site Designee moves around the room to capture teacher-child(ren) or peer interactions, while also following site

health and safety protocols for social distancing. The Site Designee uses Teachstone's guidelines and captures interactions where the majority of the children are interacting with the teacher. If multiple teachers are interacting with children, the Site Designee moves around to capture most of the interactions in the classroom.

- For small group format, the Site Designee captures an equal amount of time with each group during the observation cycle. The Site Designee uses either a preselected location in the classroom for each of the small groups or moves around the classroom to capture each group.
- For transitions during the cycle, the Site Designee moves around the classroom and captures the interactions.

References

Pianta, R. C., La Paro, K. M., and Hamre, B. K. (2015). *Classroom Assessment Scoring System Manual, Pre-K*. Baltimore, MD: Paul H. Brookes Publishing Co.