UCLA | School of Education & Information Studies
Center for Improving Child Care Quality

Final Report:
Virtual CLASS Assessment Pilot for Quality Start Los Angeles (QSLA)

Conducted by the UCLA Center for Improving Child Care Quality (CICCQ)
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Virtual CLASS Pilot for Quality Start Los Angeles (QSLA)

On March 13, 2020, Quality Start Los Angeles (QSLA) determined that all Quality Counts California (QCC) rating assessment visits should be suspended due to the state-wide COVID-19 shutdown orders. Since that date, QSLA assessors have not conducted any in-person QCC assessments for the safety of children and staff.

QSLA prides itself on ensuring children in L.A. County are receiving high quality early childhood education and care. It is important to QSLA that this high quality care remains as consistent as possible, especially during such stressful times. Therefore, QSLA's assessment lead, the Los Angeles County Office of Education (LACOE), looked at the assessment process as a whole to identify what could be implemented to support teachers, while keeping ECE staff, children, and families safe. Of the seven elements in the QCC CA Rating Matrix elements, the Classroom Assessment Scoring System (CLASS) tool, created by Teachstone, was identified as one of the most comprehensive elements for determining quality. Research has identified effective teacher-child interactions as one of the most important aspects of early childhood education with the potential to enhance child outcomes (Phillips & Lowenstein, 2011).

QSLA recognizes the importance of supporting teachers in continuing to create environments where high quality teacher-child interactions occur, despite COVID-19 changes to the classroom, therefore the QSLA Assessment Committee discussed options for how to complete such an assessment. As assessment is one of the most effective ways to determine a baseline of support needed, it was important to the committee that this option be given to providers currently participating in QSLA. It was determined that due to Child Care Licensing and the Los Angeles County Department of Public Health requirements limiting the number of people present in a classroom, and the need for ECE providers to limit the exposure of children to outside individuals, in-person supports would not be possible.

In June 2020, the UCLA Center for Improving Child Care Quality (CICCQ), with the support of QSLA Assessment Committee, began to develop the idea for carrying out virtual CLASS assessments, using teacher's recordings of their classroom interactions as an alternative to in-person observations. This virtual CLASS observation plan was presented to, and approved by, the QSLA Leadership Council in July as an assessment option, in light of local and state COVID-19 restrictions. Given these conditions and the QSLA Leadership Council's commitment to measure sites' progress, piloting a virtual method using video recordings for carrying out QSLA quality ratings seemed like a viable solution that could have positive implications for the future of a Quality Rating and Improvement System (QRIS).

Virtual CLASS Assessment Pilot Planning and Implementation

The project design and planning phase, along with the research, selection and purchase of equipment, recruitment of early learning sites, training of assessors on the virtual assessment

protocol, and implementation of virtual assessments occurred over a 2-month period, from September 25 to November 30, 2020. Pilot participants received the recording equipment in groups (3-4 providers per week) over four weeks, from October 26 to November 20. All videos were reviewed and coded the week after they were recorded. Videos for all sites were scored, cleaned, and entered into the QSLA iPinwheel database by December 1.

Planning and Preparation

Once the Virtual CLASS Assessment idea was approved, UCLA Center for Improving Child Care Quality (CICCQ) jumped into researching the validity of using recordings of teacher-child interactions instead of in-person observations. Available resources on how COVID-19 was changing classroom interactions were reviewed along with the implications of those changes for CLASS scoring. This included the following activities undertaken by the CICCQ CLASS assessment team:

- Attended all Teachstone webinars and reviewed all documents on the Teachstone website relating to virtual CLASS assessments and use of the CLASS in settings altered by COVID, to inform the planning for implementation of virtual CLASS assessments
- Contacted Sarah Hadden from Teachstone for additional guidance on setting up video equipment and scoring of recorded classroom interactions, including multi-age settings in Family Child Care Homes (FCCs)
- Met with Debra Colman from Los Angeles County Department of Public Health
- Attended all L.A. County Department of Public Health ECE Tele-briefings, to better understand the regulations that providers were being required to follow
- Took into consideration the new schedules and activities occurring in ECE programs due to COVID

Research Evidence

Prior to the pandemic, Teachstone had validated the use of video recordings for CLASS scoring (Pianta, La Paro & Hamre, 2008), and other research studies have validated the use of video-based coding for the CLASS (Hadden, 2020). "My Teaching Partner," a professional development program created by CLASS authors constructed around the CLASS dimensions, is based on having teachers record themselves for coaching purposes (Pianta, Mashburn, Downer, Hamre, & Justice, 2008). Since the pandemic began, CICQQ has been closely monitoring the Teachstone CLASS guidance for how to best record in classrooms and how to score the CLASS under COVID-19 conditions, including guidance for coding specific CLASS dimensions (Teachstone, 2020; Teachstone, 2020a; Teachstone, 2020b; Hadden, 2020).

Recording Equipment

It was important to research and determine the best equipment for recording teacher-child interactions in classrooms. At the end of September and into early October, the recording equipment was researched and purchased while simultaneously, sites were recruited to participate in the pilot. The first three weeks of October were used to set up the recording equipment, train

staff on the use of the equipment, and develop the supporting materials of written and video instructions for providers to easily use the recording equipment.

CICCQ selected the equipment to be used in the pilot based on the price, ease of use, and recommendations available from Teachstone. An Android tablet was selected because its file format for video recordings was not proprietary (unlike Apple iPad video recordings) and could be more easily uploaded and stored across different platforms. Protective cases were purchased for the tablets in case of accidents. CICCQ determined that use of tripods would ease the process so that staff did not have to hold the tablet during recording. Using a tripod also enabled staff to place the tablet anywhere in the classroom. Based on Teachstone's recommendation, CICCQ selected a wireless lavalier microphone, which teachers attached to their clothing that allowed freedom of movement while recording. LACOE approved the purchase of four recording kits for the pilot. Each kit contained a tablet and case, two microphones, and a tripod. Extended warranty protection for accidental drops was purchased for the tablets and microphones. Each piece of equipment was labeled with its name for easy reference to the supplemental support documents.
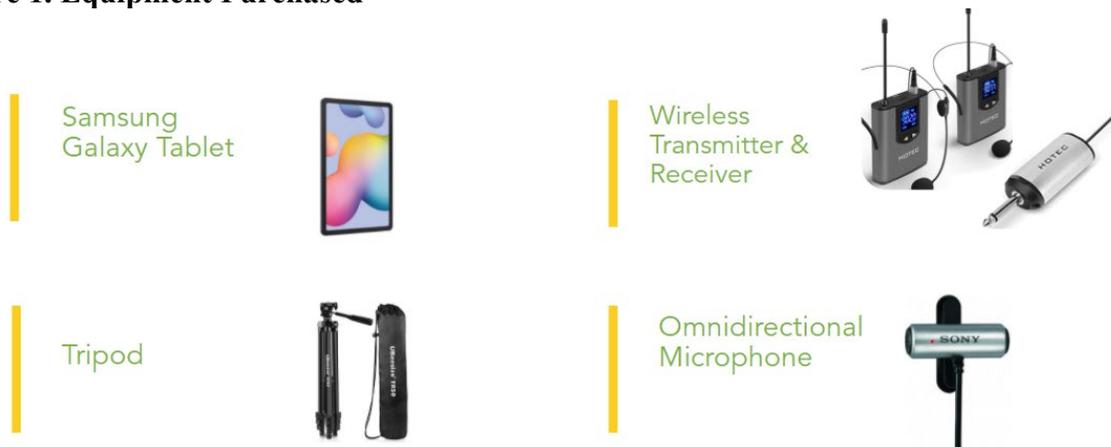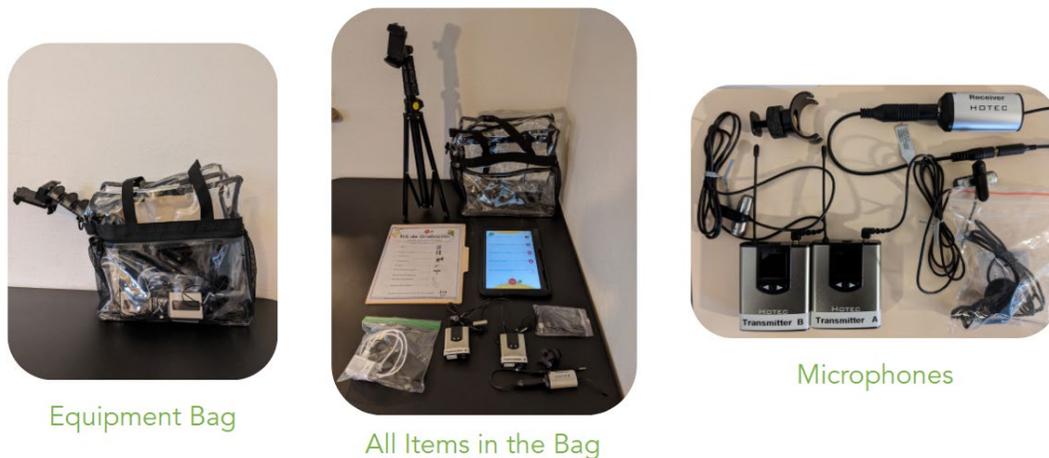
Figure 1. Equipment Purchased

Figure 2. Recording Equipment Kits

All equipment was placed in a reusable plastic bag to be easily sanitized.

***Supporting Providers' Use of New Technology***

A common concern raised throughout this process was that QSLA providers would have a wide range of technology skills and might struggle with using the equipment to record themselves. Therefore, CICCQ undertook extensive work to create supporting documentation with step-by-step instructions to help guide providers through the process for recording themselves. The supporting materials in the kits included informational documents in a welcome folder, videos to help providers set up their equipment, and streamlining the set up of the tablet so it could only be used for recording. All supporting materials were created in English and Spanish.

To make it easier for teachers to set up the recording equipment, CICCQ took the following steps:

- Each piece of equipment in the kit was given a color coded label
- The recording kit contained a printed equipment list with labeled photos for reference
- The tablet was set up in a user-friendly manner, with the following features, for teachers to easily open and set it up to start recording:
    - tablets had a customized QSLA lock screen with a simple passcode (provided to teachers), to avoid any changes to the tablet if a child handled it
    - tablets only allowed access to the items that would be needed for recording and all other applications were removed from the home screen
    - two instructional videos explained how to set up the tripod and microphone
    - the camera function automatically opened to the recording option
    - a document on the home screen provided step-by-step guidance for how to delete a video so teachers could easily select the videos to submit for the pilot and remove the others

Figure 3. Tablet Home Screens

Tablets were set-up in a user-friendly manner with a customized home screen and wallpaper.
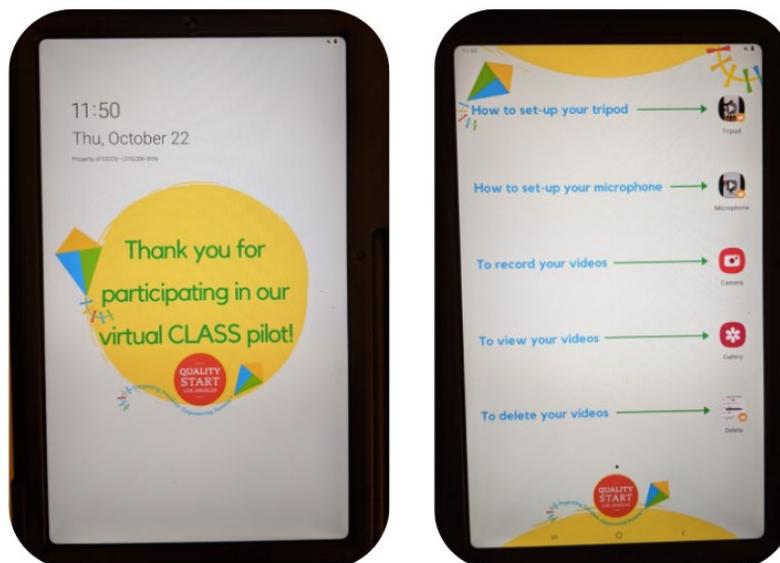
Recruitment & Scheduling of Pilot Sites

Thirty-eight sites (16 FCCs and 22 centers) were sent an email describing the virtual CLASS assessment pilot project. CICCQ staff followed up by phone with 19 center directors and 16 FCC providers to ask if they would be willing to participate in the pilot. In both the email and the call, it was made clear to the provider that participation in the pilot was voluntary and would not affect their QSLA status, nor would this virtual CLASS assessment be used for rating purposes. Participants understood that their participation would be used solely to inform the pilot and scores could be used to inform coaching and the professional development needs of staff.

Volunteering for the Pilot

Overall, the response from providers contacted to participate was positive. The majority of center directors were interested in the project and open to the idea of doing a virtual CLASS assessment. Directors affirmed that they would not be able to allow observers into their site, due to COVID-19 restrictions, and they were excited about the prospect of continuing to receive feedback on classroom interactions by having teachers record themselves.

A number of directors at large agencies were so eager to participate that they offered to have more than one of their sites take part in the pilot. Additionally, among the sites that participated, several offered to have teachers in more than one classroom record themselves. CICCQ determined that only one classroom per site would participate to ensure that a range of different sites was included in the pilot. Of the 19 sites contacted, only two directors declined to participate in the pilot, responding that they already had a lot to manage with running their sites, given the changes related to COVID-19.

FCC providers expressed more concerns about participating in the pilot than center directors. These providers were unsure about participating because they were already managing a lot at their site under COVID-19 conditions. Three providers mentioned that they were caring for a broader age range of children, including school-age children who were doing remote learning, and that adding a virtual assessment on top of caring for the children would be too much at that time. However, these providers indicated that they might be interested in having a virtual assessment at a future date when they anticipated that the remote learning routines of the school-age children would be better established. Two providers also expressed some reservations about managing the recording technology, particularly because of the changes they had made in their spaces to accommodate the school-age remote learners.

A total of thirteen QSLA providers (3 FCCs and 10 centers) were recruited to participate in the virtual CLASS assessment pilot process. Sites were intentionally selected to represent the diversity of providers involved in the QCC/QSLA rating system. The following types of sites participated: three family child care homes (one Spanish-speaking, one English-speaking and one Spanish/English bilingual) and ten centers (two Head Start sites, two Montessori sites, two University-affiliated sites, one school-district site, and three sites associated with large agencies that operate multiple sites in Los Angeles County).

Information Collected from Sites During Scheduling

When a provider was scheduled to participate in the pilot, they were asked specific questions about the classroom that would be recorded, including:

- how the classroom was physically arranged
- the number and ages of children
- the number of teachers
- how the day was structured
- additional information related to COVID-19 alterations of the classroom

This information was very important because it enabled CICCQ to design specific guidance and recommendations for ensuring the videos adequately captured classroom interactions. Capturing the conversation of teachers and children, as well as their facial expressions, are both critical for scoring the CLASS. The recording guidance also specified how many recordings should be done with each of the teachers in a particular classroom, based on their staffing (see tables on following page).

Health and Safety Precautions

All CICCQ staff participating in the pilot were provided with face masks, face shields, hand sanitizer, and disinfecting wipes purchased from the UCLA Environment, Health and Safety Department. Each day that CICCQ staff members went to a site to drop off or pick up recording equipment, they were required to complete UCLA's online, daily COVID-19 symptom monitoring screening before leaving their home. UCLA issued a certificate of clearance for the day when a staff member reports no symptoms. CICCQ maintained records of all symptom screenings completed by staff during the pilot.

When the CICCQ staff person arrived at a participating pilot site, they phoned to tell the provider they had arrived and met the provider outside the building. CICCQ staff members did not enter any early learning sites during the pilot. The same assessor would drop off and pick up equipment from a given site. All the equipment was thoroughly sanitized before and after use by a site, as was the reusable plastic bag for carrying the equipment.

Virtual Assessment Implementation Process

Each week, recording kits were dropped off by CICCQ assessors at sites on Monday and picked up on Friday, giving sites multiple days to complete their recordings. Providers were asked to record four videos, each 20 minutes long, during the course of the week. In addition to instructions for using the recording equipment, sites were given guidance about what and who to record. For instance, in a classroom with two lead teachers and no assistants, they were asked to submit two videos for each of the teachers. The tables below were given to teachers to determine who to record, based on the composition of the teaching team in the classroom.

Figure 4. Recording Guidance per Classroom Staff

Classrooms with 2 Teaching Staff	
Teaching Staff #1	Record 2 videos
Teaching Staff #2	Record 2 videos

Classrooms with 3 Teaching Staff	
Teaching Staff #1	Record 2 videos
Teaching Staff #2	Record 1 video
Teaching Staff #3	Record 1 video

Once retrieved from the sites on Friday, the recording equipment was sanitized and checked to make sure all equipment was intact. Assessors then downloaded videos off the tablet, ensured the tablet settings were restored to the format needed for recording, and charged the tablet and microphones for the next round. On the following Monday a different group of providers received the recording kits.

The week after the videos were recorded by providers, CICCQ CLASS assessors coded the videos by watching them once and scoring them as they would during an in-person observation. Once they completed coding, they entered their scores into iPinwheel. Because of COVID, the data cleaning process was modified. Rather than swapping their score sheets in person, each assessor created a scanned PDF of their score sheet, which they shared electronically with another assessor for cleaning. After cleaning, the scores were checked by the CICCQ CLASS approver, who made any final changes and approved it in iPinwheel.

Guidance for Video Recordings

Teachers were asked to record a variety of activities and formats to ensure that the assessment would capture the different types of interaction and instruction that children receive throughout the day. They had the option to record all their videos on a single day, or over the course of three days. Teachers could also record more than four videos, and then select the ones they thought were best. The decision to allow for flexibility was chosen because it added an opportunity for providers' reflection of their teaching and alignment with CLASS dimensions. It also allowed teachers flexibility in when to record due to the impacts of COVID restrictions on the classroom environment.

CICCQ asked providers to record a minimum of four videos, each 20 minutes long, to best mimic an in-person CLASS observation cycle. Video recording guidance from Teachstone recommends that the number and length of videos recorded be determined by local needs (Teachstone 2020). Based on the QSLA model, it made sense to have teachers record the equivalent of four CLASS cycles, as would be used for an in-person assessment. Having the videos recorded in separate 20-minute cycles, as opposed to one longer video, was also based on logistical considerations: It reduced the possibility of recording errors going undetected in the middle of the video and gave the teachers an opportunity to charge their equipment, especially microphones, between recordings. It is also easier to upload four shorter videos than to upload than one long one.

CICCQ also consulted with Teachstone for guidance on recording in FCC settings, specifically to determine which CLASS tool to use in a multi-age setting when not all children may be visible in the video. For in-person assessments, the assessor selects the CLASS tool based on the majority age group of children present. However, a virtual assessment with a limited view of the classroom made it harder to determine the majority age group present. Teachstone provided a document with three options for observing in a FCC setting (Teachstone, 2020):

1) Use the majority age group present
2) Alternate between different tools based on the children present (e.g. conduct three cycles of Pre-K CLASS and three cycles of Toddler CLASS)
3) Use the Toddler CLASS which incorporates some aspects of the Infant tool and some aspects of the Pre-K tool

Given the challenges of determining the ages of children present in a virtual observation, options 1 and 2 were not feasible. Therefore, CICCQ elected to use a Toddler CLASS for all of the FCC assessments.

Selection of Videos to Submit for Assessment

It was decided that teachers should have the flexibility to submit four videos of their choosing as a means to involve them in reflection about their teaching practices as a part of the quality improvement process. The interactions that a teacher chose to submit for their quality rating tells us a lot about what they think constitutes "best practices." One of the benefits of having teachers select which classroom interactions to record and submit to the QRIS for their assessment rating is it provides a window into what the teachers consider important or representative examples of their teaching (Howes, Hamre, & Pianta, 2012).

Allowing teachers to determine which recordings were submitted helped reduce their concerns about whether the observation on a given day exemplified their best teaching, especially with added concerns about COVID interruptions. If an assistant teacher was absent or there were other anomalies in the classroom, the teacher had the option to not record that day. Having the teaching team self-select when to record and which recordings to submit allowed staff to self-evaluate the quality of interactions in their own classroom.

Results

Of the thirteen sites who participated in the pilot study, eleven sites successfully recorded four complete videos and two sites successfully recorded three complete videos. Two sites were scheduled for an additional week to complete their recordings due to issues they encountered during their first attempt. The video and sound quality were fine using the microphones and tablets purchased for the pilot. For both video and sound quality, there were some issues related to the way certain providers used the recording equipment, which are detailed below. During the pilot, two tripods were broken and replacement tripods were purchased. No other equipment was damaged.

Lessons Learned from the QSLA Virtual Assessment Pilot

Piloting a completely new assessment protocol, using new technology and under novel conditions related to COVID, created a steep learning curve for the CICCQ team. New lessons were learned each week throughout the pilot period. These lessons fall into two different categories: 1) Those related to the logistics of having sites recording themselves; and 2) Those related to scoring the CLASS tool.

Logistical Lessons Learned

Logistical lessons learned related to implementing the pilot and the process of actual recordings of teacher-child interactions. Lessons learned were either solved throughout the pilot as they arose, or will be solved in future virtual assessment efforts due to timing. Despite the planning and preparation, problems still arose and these lessons are here to support future virtual assessment modifications.

Length of Time to Move Videos off Tablets

One of the most time-intensive parts of the pilot was determining how to efficiently upload the recorded videos from the tablet onto a secure server or platform. Assessors were not able to upload videos from the tablets onto the server using mobile Wi-Fi jetpacks for a variety of reasons. During several attempts using different methods for downloading, videos could not be uploaded after three hours. It was important that video recordings were removed from tablets each Friday so that the tablets could be reset and distributed to a new group of sites the following Monday.

Solution. Transferring videos off the tablets using a USB Flash drive was the most cost effective and time sensitive solution for solving the upload problems during the pilot. Once the videos were on the flash drive, there were two options:

1) upload videos onto the server from the flash drive
2) assessors could watch and code videos directly from the flash drive

Due to the short timeframe of the pilot, assessors watched and coding videos from the flash drive so that the following weeks scheduled assessments were not delayed.

Time Needed to Record

One center contacted CICCQ the day before pick up to ask for additional time. They had not been able to record their videos because one of their teachers was out sick. One FCC provider requested that CICCQ pick up the equipment at a later time because she had not been able to complete all the videos earlier in the week.

Solution. Allow scheduling flexibility to accommodate sites that do not successfully record their videos during their originally scheduled assessment period, especially since sites will experience sick leave due COVID-19. In addition, encourage sites to contact CICCQ immediately when they are unable to record their videos, and/or would like to request changes to the scheduled pick up

date. It is best to have additional recording equipment available, so as to not impact the assessments scheduled for the next week.

Submitted Recordings

Once CICCQ assessors opened the tablets to review and code videos, they noticed missing or short videos were available. This was not shared with CICCQ before equipment was retrieved, so therefore CICCQ assessors had to work with what was submitted or reschedule on a tight timeline.

Solution. It is important to have scheduling flexibility to fit in sites that are not able to successfully record their videos during their originally scheduled assessment period. If possible, have additional equipment ready if sites run into challenges with completing their recordings. It is also important to ask sites to verify the number of videos recorded before returning the equipment.

Sound Issues

One center contacted CICCQ because the teacher was having trouble with the sound in her video recording. In addition, one FCC dropped the tripod and tablet in the middle of a recording; the site continued to record and it did not capture sound after it was dropped.

Solution. Create a troubleshooting document for future assessments to help staff properly connect the microphone receiver's auxiliary cable to the tablet. Remind teachers to check that the microphones have not become unpaired after a period of time, resulting in a video without sound. Encourage staff to check the sound if the microphone is not sufficiently charged and/or it has been dropped, before resuming recording of classroom interactions. If a site has recorded for 10 or more minutes, it is not necessarily required for them to record a new video because 10 or more minutes is sufficient time to code one CLASS cycle.

Labeling Recording Kits and Videos

Recording kits were not initially labeled with the site's name. When multiple recording kits were picked up by the same person, it was hard to track which equipment belonged to which site. Likewise, when videos were uploaded without labeling them first, it was difficult to decipher which videos had already been uploaded.

Solution. Create site labels before the beginning of the assessment cohort so that staff are prepared and have all the materials needed to identify equipment for each site. Ensure videos are labeled correctly by assessors before videos are removed from tablets.

Identifying Videos to Code

Some providers left more than four videos in the camera folder on the tablet. They did not select four videos for their assessment, so CICCQ staff had to sort through the videos to determine which four to code for assessment.

Solution. To ensure that only four videos are submitted, create a Recording Guidance Checklist which gives more specific information to providers. If this continues to be a problem after providing the Checklist, it would be important to give assessors additional training on how to select the best videos for coding.

Broken Equipment

Two sites broke their tripods and did not inform CICCQ during the week, nor did they inform the assessor during pick-up on Friday. All providers were required to sign an agreement when they received the equipment, stating they would inform CICCQ if any equipment was broken.

Solution. Assessors will need additional time to check the equipment, in preparation for the following week. Additional equipment will be purchased in case broken equipment needs to be sent off site to be fixed.

Preparing Equipment for Next Week of Assessments

Assessors' tasks after retrieving equipment from sites on Friday are significantly more complex and time-consuming than expected. CICCQ staff found the process of sanitizing kits, charging equipment, transferring videos, and resetting four tablets on Friday to be both complicated and time consuming. There are many different items that need to be charged in the staff person's home which require using all their available outlets and having the recording equipment dispersed throughout the house. In addition, with staff working from home, they were concerned about the safety of the equipment and the resulting lack of personal space in their home.

Solution. Provide ample equipment and supplies for assessors to help keep this process organized, such as the use of surge protectors with multiple outlets so all the equipment can be charged in one place. In regards to personal space and equipment safety, assessors were reminded of the insurance policies on equipment. The best option would be for staff to charge and keep equipment at the office, however, due to COVID restrictions, that was not possible.

Video Orientation

Some sites recorded their videos with the camera oriented vertically instead of horizontally. This captured less of what was happening in the classroom and made it more challenging to code videos. It is important to have recordings completed horizontally so that more of the classroom and children are represented on the video. However, when videos were recorded vertically, assessors were still able to code the videos.

Solution. Update the Recording Guidance document to provide more detailed instructions on how to capture the video and explain why it is important to record horizontally.

CLASS Scoring Lessons Learned

Scoring the CLASS in a video recording is obviously different than doing it in person. For this pilot, the ability of the assessors to interpret what is happening in classrooms was further complicated by COVID related changes, such as the use of face masks. Some of the same questions about how to score the CLASS came up repeatedly for CICCQ assessors during the pilot. In addition, assessors were challenged by seeing clips of activities from random times throughout the day, rather than observing the daily schedule unfold as they would in a live observation. During the first and second weeks of the pilot, there were three CLASS dimensions that CICCQ assessors found challenging to score because of COVID-19-related changes in classrooms. The CICCQ CLASS assessment team discussed these issues thoroughly to reach a consensus on how to score these dimensions.

Positive Climate

When teachers were wearing face masks, it is more difficult to identify a person's affect for the Positive Climate dimension. In the case of a teacher who was wearing a face mask and glasses, it is very hard to ascertain affect based on facial expressions.

Solution. The team identified other ways to determine a person's affect such as: voice tone and/or pitch (e.g. did the teacher's voice convey enthusiasm or was her voice monotone), body language (e.g. did the teacher orient towards the children indicating interest in what they are doing, or was she sitting still, or leaning/facing away from the children), hand gestures which can convey enthusiasm, and interactions with children (level of involvement or non-involvement with children).

Regard for Student Perspective

Assessors found it challenging to score the Regard for Student Perspectives dimension because of the ways that COVID-19 licensing regulations limit children's autonomy. For example, children were not able to serve themselves food or drinks due to COVID-related safety practices.

Solution. The team was able to identify other ways that children can be given autonomy in the classroom in order to score this dimension. Some examples are younger children being allowed to feed themselves, giving children the choice of what to eat and how much of it, giving children the opportunity to request seconds, being able to decide who to talk to during mealtimes and allowing the mealtime conversations to be child-led.

Teacher Sensitivity and Behavior Management

Assessors found it more challenging to score the Teacher Sensitivity and Behavior Management dimensions due to the recording frame not showing as much of the classroom would be seen in-person. For example, it was more difficult to determine how children were being monitored because teachers other than the one being recorded were not always visible in the background of the video.

Solution. Based on the children's behavior, the team was able to determine if they were being monitored or not.

Survey Responses: QSLA Provider Perspectives

It was important to QSLA to not only practice the implementation of the virtual CLASS observation, but to also understand what providers thought about participating in this new assessment method. To collect site perspectives, CICCQ collected survey information to address the question of how providers felt about the actual process or idea of having a CLASS assessment performed virtually. Two different surveys were created and distributed to: 1) pilot participants after completing their virtual assessment and 2) QSLA providers who did not participate in the pilot.

Pilot Participant Responses After the Virtual Assessment

CICCQ developed three surveys for pilot participants: one for center directors and site supervisors, one for center teachers and teacher assistants, and one for FCC providers. After a site completed its recordings for the pilot they were sent an email with a link to the survey asking about the staff's experience with the pilot process. Below are the responses from each group of participants.

Director/Site Supervisor Survey Responses

The survey was sent to the director/site supervisor at ten center pilot sites, and CICCQ received five responses. Generally, their responses were more positive than those of classroom teachers, which we attribute to the fact that directors and site supervisors did not have to carry out the classroom recording, so they were one step removed from any technical challenges presented by the virtual assessment process. All directors and site supervisors rated the overall experience as a positive one, with two directors mentioning the desire for more time for their site to complete the recordings, and another one commenting that "fear of technology" created some stress for her teaching staff.

Sixty percent (three out of five) of directors indicated that, if given a choice in the future, they would elect to have a virtual assessment instead of an in-person one, and one director indicated she would consider a virtual assessment. The reasons they gave for this were related to it being less stressful for the children and teaching staff than having an observer in the classroom. As one director commented, "*Teachers and children felt more comfortable doing it virtually than in person; it was more natural and less interruption or distraction than in person. When it's an in-person observation, children get distracted and get overwhelmed.*"

Another director noted that doing a virtual assessment gave teachers more autonomy to determine when to record and which activities to include. The director who said she might elect a virtual assessment expressed concern about the teachers' ability to correctly use the recording equipment. Surprisingly, only one director cited COVID-19 restrictions as a reason for preferring assessments be done virtually rather than in person. The one director who indicated she would prefer an in-person assessment stated, "*In-person observations may allow the observer to see the*

full picture as opposed to one isolated event." Despite this, the same director also commented that she did not anticipate any barriers to having a future virtual assessment and she would be happy to participate.

Teacher and Assistant Teacher Survey Responses

The survey was sent to 15 lead teachers and teacher assistants, and five responses were received. As noted above, because teachers had to manage the logistics of setting up the equipment and managing their classrooms while doing the recording, they had more to say about the technical challenges of the pilot than directors did.

Most teachers expressed that they would have liked more time to complete the recordings. Most sites received their recording equipment on Monday and the equipment was picked up Friday, giving them three full days to do the recordings. Several providers had one day less to record, due to the Veteran's Day holiday, and these teachers expressed frustration about completing the recordings in the reduced time allotted.

Although all the teachers indicated that they had completed the recordings in three days or less, their comments revealed some of the difficulties they experienced. For example, *"The time frame you give teachers to actually make the videos needs to increase! It should be at least 2 weeks, not 2-3 days. Even with the instructions and videos, like children, everyone learns differently, and not everyone will be comfortable and knowledgeable about the equipment so quickly. It takes time to read/watch the tutorials, and practice setting up, let alone to feel ready to record!"*

When asked if they would choose the option to have a virtual assessment, rather than an in-person one, in the future, two of the five teachers said they would not, two said they would and one said she might consider it. In describing their reasons why not, the two teachers mentioned their nervousness or discomfort with being recorded, and one commented on the time pressure to complete the recordings. The two who said they would choose a virtual assessment commented on the greater control that doing recordings afforded them, unlike in-person assessments. It gave them more freedom in deciding which activities to record, *"We did enjoy the flexibility of being able to record and delete if needed and doing it all over again."*

The one teacher who said she might opt for a virtual assessment noted that although it is obviously the safer choice during the pandemic, the teachers in her classroom felt rushed to complete all the videos in the limited time given.

Family Child Care Provider Survey Responses

The survey was sent to the three FCC providers who participated in the pilot, and two responses were received. Their responses were generally positive, although both of them noted that it would have been helpful to have more time to complete the recordings. Both commented that it was less stressful for the children in their care to do a recording than to have an in-person observation. One provider noted that because the children are used to the provider taking photos of them, they acted "more naturally" while being recorded than they would with a live observer

there. These two providers indicated they would choose a virtual assessment in the future, if given the option.

Responses to Survey from Providers Who Did Not Participate

A different survey was sent to 486 directors, site supervisors, and administrators who are part of the QSLA CSPP database, and 92 responses were received. The beginning of the survey describes the virtual CLASS and child file review process as it was conceived of by CICCQ and the QSLA Assessment Committee. The survey asks providers whether they would consider participating in a virtual, rather than an in-person assessment, should that option be available in the future. Seventy percent of providers indicated they would participate in a virtual assessment, 25% answered they might consider doing a virtual assessment, and 5% indicated they would not be interested in a virtual assessment.

Figure 5. Results Related to Future Virtual Assessment

If available, would you agree to participate in a virtual assessment INSTEAD OF an in-person assessment?
93 responses

- Yes
- No
- Maybe

24.7%

69.9%
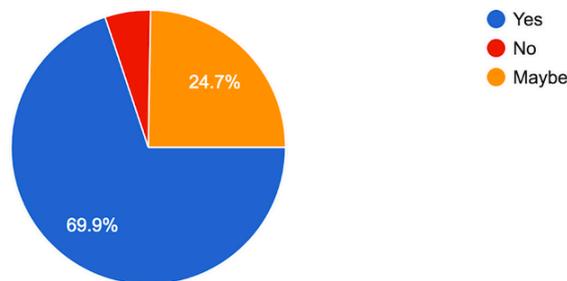
The reasons providers cited for not wanting to participate in a virtual assessment focused on the challenges their teaching staff are already coping with COVID-19 conditions and the additional stress this would add. As one provider put it, "*In order to comply with all of the [COVID-19] hygienic requirements, adaptation of the environment and the curriculum, I don't have the heart to add one more thing to their plate.*" Two of these providers also expressed concerns about the technical challenges of video recording in classrooms.

Among the majority of providers who expressed a willingness to consider virtual assessments, the primary reason, selected by 78.5% of respondents, was COVID-19 safety concerns and health regulations limiting visitors at their sites. Several providers also mentioned the importance of continuing to receive feedback about the interactions at their sites during the pandemic, as well as the need for rating so that sites can continue to receive funds for improvement. For example, "*It is important to us that we continue to adapt and continue to get the feedback provided by professionals, along with the incentives for our centers and children.*" Forty-five (45%) percent of providers also indicated that it would be less distracting for children to do a virtual assessment, and 43% indicated that being able to complete recordings over multiple days could be beneficial.

When providers were asked about the challenges to completing virtual assessments, a majority (67%) mentioned concerns about privacy issues related to video recording. Fifty-two percent expressed concerns about teachers not wanting to record themselves, and 43% mentioned that it could be hard for teachers to set up the recording equipment. Other apprehensions cited by providers included getting permission to record from teacher unions, technology challenges, and the need for sufficient staffing to carry out a virtual assessment.

Despite these concerns, when asked what they would prefer for their next QSLA assessment, 69% of providers indicated a preference for a virtual assessment, and 31% preferred an in-person assessment. These percentages are similar to the number of providers above who indicated they would consider a virtual, rather than in-person, assessment and their reasons were also quite similar.

Of the 22 providers who gave a reason why they would prefer their next assessment to be done in-person (it was optional for survey respondents to provide an explanation for their preference), about two thirds expressed concerns about how well a virtual assessment would capture classroom interactions, and whether assessors would be able to get the full picture of what was happening with a video recording. As one provider commented, "*I think it [in-person assessment] is a better measure of what is actually happening day to day and it supports the hard work we do to provide quality everyday.*"

Three providers who explained why they would prefer an in-person assessment focused on the ways it would be less stressful and less burdensome for their staff, especially with all that teachers have to worry about to keep their classrooms safe because of COVID-19. One provider aptly explained, "*Right now is a difficult time for families and teachers. Of course we want to offer high-quality education regardless of the platform, but putting this on teachers at a very difficult time feels even more stressful. Can we just think about the emotional needs of our educators?*"

Almost all providers who indicated they would prefer their next assessment to be done virtually cited safety and compliance with COVID-19 health and safety regulations as the reason. The other reason a number of providers gave was related to their site not currently offering in-person instruction. One provider also noted how a virtual assessment could be a positive experience for her staff, *"I think once the teachers get used to the idea of being recorded they will be more relaxed. There is not the anxiety of 'one and done.'"*

Challenges and Benefits of Implementing a Virtual CLASS Assessment

As expected with any new implementation, challenges and benefits were discovered. Below are a few challenges and benefits uncovered during the course of implementing the virtual CLASS assessment pilot. Efforts were established before to alleviate what the team thought might be concerns for participants, however, important information was learned and will be used to make future modifications.

Challenges

In preparation for this pilot, much discussion went into trying to mitigate as many problems as possible, before implementation. However, unforeseen challenges still arose. These challenges are listed below with potential solutions for future virtual assessments.

Technology Know-How Among Providers

Providers had varying degrees of technology use and experience, which increased the need to provide technical support. CICCQ was able to identify potential solutions to the technical challenges identified during the pilot. The effectiveness of the solutions depends on how well providers follow the instructions provided to them, and their willingness to reach out for technical support, if needed. The information created for the pilot included guidelines for which activities to record, how to orient the tablet while recording, and ensuring that all classroom teachers are recorded at least once. These materials can be enhanced to address other issues that arose during the pilot. Additional troubleshooting issues may come up when virtual assessments are undertaken with more providers.

Coding in a COVID Environment

There were some challenges related to coding the CLASS under COVID conditions, such as the limited ability to see teachers' facial expressions while masked. As assessors become more familiar with coding in these conditions, we expect it will become less of a concern. Until then, to address these issues, CICCQ assessors reviewed coding questions as a team and were able to find solutions that enabled them to score the CLASS reliably. However, time must be allocated for weekly team meetings that enable assessors to discuss and view videos together to ensure continuity of assessments and reliability of scoring.

Benefits

Despite challenges that occurred, virtual observations shared many benefits. Implementing such a different process is scary, however, it is exciting to share the positive results and how these can help support ECE providers in the future. These benefits are listed below.

Enhanced Understanding of CLASS

Virtual assessment has a number of benefits to the field and for QRIS. Unfortunately, due to the short timeframe of the pilot, these benefits could not be explored in detail. However, going forward, QSLA will consider how virtual assessment findings can be used by coaches to guide capacity building efforts for the teaching teams they serve. Video recordings open up a host of quality support opportunities for teachers and coaches as a way to review interactions together and use CLASS scores and notes as a reference point for professional development (Howes, Hamre & Pianta, 2012). Having a common point of reference allows the coach to pinpoint specific interactions and give the teacher recommendations based on her own behavior. This could provide an opportunity for both coaches and teachers to deepen their understanding of the CLASS dimensions, and lead to more effective professional development supports. It is important to be

aware that if the same CLASS videos are used for purposes other than assessment, the sharing of videos would require clear guidance about contesting CLASS scores. It would be important to be clear that the videos would be used only to inform professional development and coaching. An option would be to share just one CLASS cycle for each provider, rather than all four cycles used for the assessment. One cycle would be a manageable segment for the coach and teachers to work with, and could help reduce distraction for the provider regarding their overall CLASS score.

Technology Confidence

The pilot surveys revealed the majority of providers were willing to have future assessments conducted virtually. Furthermore, most of the providers who participated in the pilot were able to successfully carry out the recordings. Participating in a virtual assessment helps bolster teachers' confidence in their ability to use technology. The ability to use technology for professional education opens doors to additional coaching and professional development opportunities. As confidence with recording teacher-child interactions grows, coaches and directors will be able to use these recordings in a variety of important professional development ways, especially enhancing self-reflection. The clearest current benefit of completing assessments virtually is that the teacher is the driver of what he or she defines as quality instruction when they choose which videos to submit for the assessment process. As this reflection skill is developed, teachers may be able to modify teaching practices without outside supports.

Pilot Limitations

QSLA realizes that the sample of participating sites was small, however, this was required due to the limited time to complete pilot assessments. In the future it would be recommendable to increase the number of the sites, focusing on school districts or teachers who are part of unions, to ensure that video recording is a possibility. In addition, if the pilot were extended, it could provide time for testing and implementing solutions to problems as they arise. Due the quick start up and implementation of this pilot over a four-week period, there was not time to make many changes in response to issues as they arose during the project period.

In addition, QSLA had considered the possibility of there being program cost savings by using virtual assessments versus in-person assessments. However, virtual CLASS assessments take more time than an in-person observation – assessors must drive to sites twice, to drop off and retrieve equipment, and the same amount of time is needed for coding. Also, as detailed in the lessons learned, virtual assessments require additional time to manage the tablets used for the video recording (e.g., uploading videos from multiple tablets, charging and setting up tablets for the following week, etc.). For these reasons, UCLA CICCQ was unable to identify any reductions in assessment costs resulting from conducting the CLASS virtually.

Conclusion

Overall, QSLA considers this pilot an accomplishment, with 13 providers able to successfully record and submit videos for assessment. CICCQ was able to gather an enormous amount of information in a short time about which parts of the virtual assessment process worked well, and the parts that still required refinement in order to bring it to scale for QSLA

implementation. The survey results indicated that a majority of providers would be willing to participate in a virtual CLASS assessment in the future. Given the COVID-19 restrictions on having outside visitors at ECE sites, virtual assessment may be the only way for teachers to receive detailed feedback on what is happening in their classrooms for the foreseeable future.

Based on the pilot's success, the lessons learned, and providers' survey comments, CICCQ finds that the benefits of conducting virtual CLASS assessments outweigh the challenges and recommends that QSLA consider a virtual CLASS assessment tied to customized coaching as an option for future assessments, during a pandemic or otherwise.

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