Benefits and Challenges of Using Virtual Assessment in Early Intervention and Early Childhood Special Education

Kathleen Hebbeler, Sheresa Blanchard, Amanda Reeve, Jenna Nguyen, Lauren Barton, and Ryan Grimm

INTECA
Innovative Technology for Early Childhood Assessment

August 2025

Virtual assessment (VA) means one or more assessors are not physically present in the location where the child is being assessed. The assessors instead use videoconferencing to collect information about what the child knows and can do. This resource addresses virtual authentic assessment, in which assessors observe the child in a familiar setting engaging in everyday routines. The assessment process may include the assessors asking the parent or other familiar adult to encourage the child's use of skills (e.g., positioning the child a certain way, asking the child to hold a book). A virtual assessment may be part of a hybrid assessment that includes an in-person component with, for example, one assessor in the room with the child while another is online at the same time.

VA is an innovative and emerging practice in early intervention (EI) and early childhood special education (ECSE). To learn about using VA for authentic assessment, we interviewed 79 state and local EI and ECSE administrators, practitioners, and families about their experiences[1]. They identified many benefits that VA provides to programs and families. We also learned that there are challenges, many of which can be lessened with appropriate strategies. VA can be implemented well or poorly, and programs need to create the conditions for VA to be effectively implemented. This document provides a summary of what we learned about conducting authentic assessment virtually.

At A Glance

Benefits of Virtual Assessment

- Improved assessment process
- Honors family preferences and needs
- Addresses staffing shortages
- Allows more assessments to be completed in a timely manner

Challenges for Virtual Assessment and Potential Solutions

- May be difficult to obtain information about the child
- Practitioners' negative attitudes and beliefs about the adequacy of the information provided by VA
- Practitioners are not fully informed about federal and state policy regarding VA, or there are state policy prohibitions
- Practitioners lack adequate preparation for VA
- Negative attitudes and beliefs about VA held by families
- Limited technology or technology knowledge

1 For more information about the interviews, see Methodology for Interviews about Virtual Assessment.

Benefits of Virtual Assessment

Virtual assessments provide a variety of benefits to practitioners and families including benefits related to the assessment process, honoring family preferences, addressing staffing shortages and assessment completion.

Improved assessment process

Benefits related to the assessment process include:

- **Equal or better-quality information than in-person assessments.** VA typically takes place in a familiar environment (e.g., the child's home) while the child interacts with familiar adults in everyday routines. The assessor, who may be unknown to the child, is not physically present and does not exert any influence on the child's behavior.
- **Increased use of authentic assessment practices.** VA is well suited to an authentic assessment which is best practice for early childhood assessment. It is less useful for direct testing which requires the assessor to ask the child to perform a series of scripted tasks. Programs using VA reported an increased use of authentic assessment.
- **Increased family participation during the assessment.** The family member(s) in the room become key to obtaining information about the child.
- **Families learn more about the assessment process, their child's disability and what their child knows and can do.** Because the family is more actively involved in the assessment, they become more aware of what the assessor is evaluating and seeing.
- **Prepares families for active engagement in supporting their child's learning and development.** Participating in the assessment lays the foundation for ongoing engagement throughout service delivery.

> *"... the child is not interacting with you, which gives you more of an accurate depiction of how they are engaging with their everyday environment... that can be more helpful than if I am present and the child's distracted by me or just wants to engage with me."*
>
> – Practitioner

> *"...the in-person ones, they don't really ask me a lot of questions...They tend to take over the whole assessment...and exclude me. With the video chat assessments, I was the center and they were asking me everything, and I was trying to get [child] to do it all."*
>
> – Family member

> *"A big benefit is [that our state] uses the coaching model. So, when we were doing our evals in-person...it was a much more structured assessment and much more standardized...it kind of set us up more as the experts at that initial assessment than it does now with the telehealth because we're already using the parents and coaching the parents. That's a benefit that helps them out because it already sets them up as the expert...it sets the tone that they're the experts on their child and we're going to observe and then help them from there."*
>
> – Practitioner

- **Allows more family members and other caregivers to be part of the assessment.** Caregivers in different places (e.g., one parent is at work) can be active participants in the assessment without having to be physically present.
- **Allows practitioners to easily record the child's behavior to obtain more information.** Practitioners could review the video later to see if they missed something or if they want to verify their notes. Also, other team members can watch the video to provide a second opinion.

Honors family preferences and needs

- **Provides an option for families who might prefer a VA.** Some families prefer VA for a variety of reasons such as easier scheduling or not having someone in their home.
- **Safer for medically fragile children.** The child is not exposed to potential illnesses from outside visitors and does not need to travel to locations outside the home.

> *"The families that choose virtual tend to do so because of the flexibility in the schedule, maybe don't want people in their home, are afraid of illness coming in, think their child will perform better and more authentically when virtual. Others are just very comfortable with using technology and that's why they like it."*
>
> – Practitioner

Addresses staffing shortages

Staffing shortages are a reality faced by many programs. VA can help programs address this problem in the following ways.

- **Families have easier access to professionals with very specific areas of expertise who are not located near the child's home.** VA allows specialists (for example, a vision specialist) to observe the child in real time when it would not have been possible for the specialist to attend the assessment in-person or to attend within a reasonable time frame.

> *"... we had a kiddo out in a super rural area, and you know, failure to thrive, so many medical things going on... [My clinical speech supervisor] is highly skilled in oral motor swallowing types of things... But she's like I'm going to take what I know about how to do these things and try to do it over telehealth, and it was super successful... So that kiddo like, gives me chills, got to have that highly skilled provider available to them where there's no way that she would have had somebody like that before."*
>
> – Program Administrator

- **Families have more timely access to professionals central to service provision, such as speech language pathologists, occupational therapists, and physical therapists who are in short supply in many areas of the country.** VA allows programs to use practitioners who live anywhere in the state or even the country and thus reduces the amount of time families must wait for an assessment.

> *"...in a certain county, we may never have a speech therapist .... Now, we are able to say your concern is speech, your concern is gross motor, let me put you with the most appropriate team. So that is a huge, huge benefit."*
>
> – Local administrator

Allows more assessments to be completed in a timely manner

Even fully staffed programs can encounter difficulties scheduling and completing assessments; staffing shortages exacerbate these difficulties. VA provides more options for scheduling assessments and makes it easier to complete more assessments.

- **More assessments can be completed in a day.** Eliminating travel time, especially in rural areas, allows practitioners to spend more time with families.
- **Families and programs have more flexibility for scheduling assessments.** Programs can provide more options for families. For example, program staff can offer appointments at times more convenient for families who are working during the day.

> *"It lets us perform more assessments...instead of having to push them off, like we don't have room, we don't have space, we'll see you in a month, we'll see you in two months. Now we can fit them in faster, so they're getting their needs met quicker."*
>
> – Local administrator

- **Reduces the need for cancellations.** Programs and families do not need to re-schedule for inclement weather, illness of another child in the household, etc. If one member of the assessment team is ill, it is easier to find a substitute assessor who can log on to a video conference at short notice. Families are more likely to keep an appointment for VA if another child is sick or something comes up that would have resulted in a no-show or appointment cancellation of an in-person assessment.

Challenges for Virtual Assessment and Potential Solutions

VA presents some challenges for programs and families. Many, but not all, of these can be addressed. The following section describes some of the challenges of VA and possible solutions related to obtaining information about the child, practitioners' attitudes and preparation, families' attitudes, policies, and technology.

May be difficult to obtain information about the child

- **Assessors may experience limitations in what they can see, hear, or learn compared to being physically present and able to touch the child.** Because they are not present and "hands on" with the child, assessors must rely on the camera, microphone, and parent descriptions, which may not adequately capture what they are looking for.

  Possible solutions:
  - Programs need to build practitioner skills in coaching families on how to best use the technology and how to work with the child during the assessment
    - Prepare the family about what to expect during the assessment and how best to support the process.
    - Prepare the family around camera positioning and type of technology to use (e.g., cell phone vs. tablet or laptop).
    - Encourage the family to reduce background noise/distractions as much as possible.
- **The assessment team may ask the family to use toys or objects in the home to demonstrate the child's skill, and the family will need to have these objects readily available during the assessment.**

  Possible solutions:
  - Communicate with the family prior to the VA about the kinds of objects that it would be helpful to have available.
  - If the family does not have these objects, identify the function of the object in the assessment and work with the family to identify comparable objects that are familiar to the child and are part of the child's everyday routines.

Practitioners' negative attitudes and beliefs about the adequacy of the information provided by VA

- **Some practitioners, especially those who have not had any experience with VA, believe it cannot provide accurate information about the child.**

  Possible solutions:
  - Provide practitioners with information about the benefits of VA.
  - Encourage practitioners to maintain an open mind.
  - Prepare practitioners to effectively implement VA.
  - If distrust of VA is based on the erroneous belief that the professional is the sole expert, help practitioners understand the importance of recognizing and supporting families' expertise regarding their child.

  A note on practitioner attitudes: Although we spoke with and heard about practitioners with negative attitudes toward VA, we also spoke with many practitioners from multiple disciplines who are experienced with VA and were very positive about it and its benefits as described above. However, we want to acknowledge that some practitioners do not like VA even after they have experience with it.

Practitioners are not fully informed about federal and state policy regarding VA, or there are state policy prohibitions

- **Some practitioners erroneously believe that state or federal laws or other policies do not allow VA.** Federal laws such as the Individuals with Disabilities Education Act (IDEA), the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and Medicaid regulations do not prohibit VA. State laws vary around the U.S. as do state licensing requirements for different professions. VA is allowed in many states, but program leaders and practitioners must be knowledgeable about any state licensing requirements and other state policies that address VA.

  Possible solutions:
  - State Early Intervention and State Early Childhood Special Education agencies need to provide guidance to program directors and practitioners as to whether VA can be conducted in their state and by which professions.
  - Directors and practitioners need to check with their state agency and check licensing requirements to be fully informed about the use of VA in their state.
  - Directors and practitioners in states with prohibitions should consider advocating to change policy to allow VA.
- **Some practitioners believe that professional standards or guidelines do not allow them to conduct assessments virtually.** We reviewed materials from 17 professional organizations with relevance to the assessment of young children with disabilities and found no evidence of professional standards prohibiting the use of VA.

  Possible solution:
  - Practitioners need to be familiar with current information from their professional association.

Practitioners lack adequate preparation for VA

- **VA requires a different skill set from an in-person assessment.** Without adequate preparation, practitioners may not elicit good information during the assessment.

  Possible solutions:
  - Provide written guidance and professional development to support practitioners in becoming proficient in VA.
  - Provide guidance for practitioners on how to prepare families for VA.
  - Ensure practitioners are comfortable with the technology and comfortable supporting families during the assessment.

Negative attitudes and beliefs about VA held by families

- **Some families believe virtual assessment is inferior to in-person.** These beliefs may be based on limited or erroneous information or on negative past experiences.

  Possible solutions:
  - Provide families with easy-to-understand information about what virtual assessment is, the adequacy of the information provided, and its benefits to families.

  Some families may prefer an in-person assessment even when they are fully informed about VA, and this preference should be honored to the extent possible.

Limited technology or technology knowledge

- **Families do not have the necessary technology or strong internet connectivity.** Nearly all families have cell phones, but they may have limited minutes, or the program might prefer they use a computer or tablet for the assessment. Not all areas of the country, especially rural areas where VA can be so useful, have cell service or good internet coverage.

  Possible solutions:
  - Programs lend families devices such as tablets, computers, or mobile hotspots.
  - Programs reimburse families for cell phone minutes if families need to use a personal cell phone.
  - Programs can work with the community and the family to find locations that have internet access and are suitable for an assessment (for example, a meeting room in the library).

  Some remote places may have no or poor cell coverage and no internet, in which case VA is not feasible.

- **Families are not familiar with technology used during the assessment.** Many, but not all, families are comfortable with various forms of technology. However, even those familiar with the technologies may not have used it for a virtual assessment and will need to be prepared.

  Possible solutions:
  - Prepare families on how to use the technology by sending instructions or by having staff walk them through how to use the technology prior to the assessment.
  - Provide easily accessible troubleshooting for families and practitioners to work through any difficulties that might arise.

> *"...when we schedule the evaluation, our intake team... gives them an idea of what that means using technology and ensures that the family has the equipment to be able to do that and understands how to do that...they walk them through how to get on that platform."*
>
> – Local Administrator

Conclusion

Our interviews with state coordinators, local directors, practitioners, and families identified many benefits of VA. Program-level benefits included improvements to the assessment process, a partial solution to staffing shortages, and increased efficiency. Families experienced benefits such as a more engaging assessment process, greater participation by multiple family members, and improved access to specialists.

However, VA also presents challenges, the most frequently mentioned being the need for reliable internet access. Other challenges included difficulties in gathering sufficient information about the child and limited knowledge or comfort with the necessary technology. Reactions to VA varied: we heard from administrators, practitioners, and families who were enthusiastic about it, as well as from those who were less supportive. Among practitioners who viewed VA negatively, it was unclear whether their perceptions stemmed from the limitations of VA itself or from a lack of support and training—especially for those who had to adopt it quickly during the pandemic without preparation. Similarly, it was difficult to determine whether negative perceptions among families were due to poor information and preparation or to working with a practitioner who lacked experience in meaningfully engaging families in a virtual format.

Overall, the individuals we spoke with identified more benefits than challenges, suggesting that virtual assessment is a promising approach when both practitioners and families are provided with the necessary support.

To access this and other INTECA resources, visit https://inteca-idea.org/benefits-challenges-of-va/

Suggested citation:

Hebbeler, K., Blanchard, S., Reeve, M., Nguyen, J., Barton, L., & Grimm, R. (2025). *Benefits and challenges of using virtual assessment in early intervention and early childhood special education*. SRI International.

IDEAs that Work
Office of Special Education Programs
U.S. Department of Education

This project is funded under a cooperative agreement from the U.S. Department of Education, #H327V220001. This document does not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officers: Anita Vermeer and Rebecca Sheffield.

SRI