SYSTEMS





Introduction & Training Manual

for therapists & teachers



Tell me about ... G E M II N I

Sure.

Gemiini (*pronounced like the constellation*), is a web-based library of video modeling clips that allows a therapist to go online to create customized therapeutic video "playlists" for clients. Almost like a Special Ed "iTunes" account. Videos are filmed in a way that strips away all non-essential information; they teach in a 'clean' and unambiguous way so that students learn fast.

In clinical trials in Washington and California public schools, this method of filming was shown to teach language and social skills at rates that were triple the speed of other video modeling methods and many multiples faster than current best practices. Gains were also observed in gross motor skills, joint attention and articulation. Many non-verbal children became verbal with this neurologically stimulating approach. For more information on clinical trials and the science behind GemIIni, see Appendix A.

In short, Gemiini puts a massive library of tools at your fingertips--over 15,000 videos. Here are the top three things therapists are saying about Gemiini:

- I
- **It saves time**. A therapist can create a week's worth of video specifically for priming a client for the next therapy session.
- \prod
- It is versatile. It gives parents an easy, clinically-valid intervention, designed by you, that can be used for hours in the home or at school.

It has videos for every skill level. From basic labelling to beginning conversation, articulation drills, sequential processing tools, social skill training for issues from preschool to teen and even SAT words.





How is that even *POSSIBLE*?

The world's top researchers have some ideas.

The results we are seeing are in double blind clinical trials are undeniable. The world's leading experts in several disciplines have looked at our gains, looked at the videos, and come up with suggestions about what might be happening. More studies are being planned to test each of these hypotheses.



NEUROLOGY

- 1. Neurologists who look at our videos believe that the repetition of predictable, familiar, non-threatening and stripped-down information may feed directly into a deeper part of the brain (the basal ganglia), which might then 'back-teach" the prefrontal cortex language and emotions.
- 2. The tight close-ups of the mouth with hyper-articulation may trigger the activation of mirror neurons in non-verbal students, priming speech pathways long before a conscious decision to speak ever occurs.



PSYCHOLOGY

1. People with certain disorders like autism do not have the same positive reaction to the human face or voice that neuro-typical people have. The pairing of a highly preferred format (video) for viewing faces may have a conditioning effect on viewers that make human faces and voices more interesting and compelling



BEHAVIORAL SCIENCES

1. BCBAs who watch GemIIni videos can see as many as 20 different tactics being used in each very simple-looking video. These tactics are most effective in a preferred, stress free environment and can be delivered efficiently and repeatedly.



It's not a business decision. It's a moral and ethical decision.

As you can imagine, running a website that serves a global community in over 20 countries isn't cheap. GemIIni has a computer programming department, actors, a full-time studio with a team of professional editors, and all of the other expenses of large businesses you'd expect.

But the founders of GemIIni—parents of five special needs children themselves (3 on the spectrum)—adopted a corporate mission when they founded the company years ago: "No child will be turned away for an inability to pay." The children always come first. If GemIIni is as powerful as we know it is, everything else will follow.

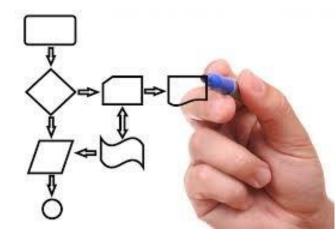
When the clinical trials were run in 2011-2014, results were far more dramatic than anyone expected. Almost all non-verbal students gained language, even in group settings in classrooms. Some classrooms gained over ten new expressive words per week, per child!

It was then that the company made its decision: we will offer scholarships for the same, full-featured Gemiini platform to any and all families that need the help. The scholarships are awarded based on a families self-stated financial position. Monthly pricing can drop from \$98/month to \$59/month, \$29/month or even \$10 per month. The \$10/month would require an email or call from you as the therapist to confirm that the family is in dire need.

We are dedicated to helping all patients. Please let your clients know of these scholarships.

Easy rules to follow in your practice

(easy...but critical)



Overall

The videos are designed to be customizable for each child. However, don't discount the power of group viewing, as we have seen massive joint attention gains with joint viewing sessions with siblings or peers. In fact, in each clinical trial performed in a public school, children were shown videos in a group setting. Videos were custom designed by teachers so that there was something for everyone in the class. That way, the higher functioning children could help their peers who might be struggling, and everybody gained.

Length of Video Sessions

Custom video Sessions should be about 10-15 minutes long. Since most individual clips that make up a session are under a minute, this means each session can be made up of 20 to 30 words or concepts. They also "loop", so they can be watched more than one time in a session.

When and Where to Use GemIIni During the Day

Once you design a video session for a child, we would encourage the parent to plan a recurring time during the day when the child can view the videos. Meal times are a wonderful time, as the child is seated and often even strapped into a high chair. Viewing in a car while commuting to school is another great option. The most important thing is that it is consistent and not stressful for the child.

Make it Fun

GemIIni's filming technique is based on the neurology of the brain. Nothing makes the brain learn language faster than getting the dopamine flowing. So get the children laughing. Add videos from the "Humor" category into your weekly sessions. Have parents use big, exaggerated motions and expressions when you mimic or interact with the videos for the students.

Critical Tips for Unlocking GemIIni's Power



Dosage

Emerging data suggest that children gain mastery of words after 25-70 viewings of a video session. Optimal exposure would be 6 viewings per day, or three viewings that run twice through.

Actual "Viewing" of Video

Many children are drawn to the screen and attend surprisingly well. In trials, researchers were surprised at gains made <u>even when children had not appeared</u> to attend to the videos. Many non-verbal children, especially, will approach the videos cautiously and only peek at them occasionally. These "peeks" do grow over time. Don't be surprised if even these 'peekers' learn the material far more quickly than you might imagine.

The Power of Humor

Some of the videos can be a bit boring. They are designed that way. But we have also filmed video clips (in our Humor category) that can serve as positive reinforcement for Gemiini patients. Add a clip or two into each custom session.

Expect Fast Results for Some Children; Be patient with Others

Some children respond quickly and learn faster than you might expect. About 10% of children respond almost miraculously. We have seen non-verbal children utter their first word during the first viewing. We have seen children gain expressive language at a rate of over 20 words/week. Don't hold them back because you expect too little. If you can, test them receptively each week. If they master the previous week's content, you may wish to add increasingly more words each week.

(see Dr. Gilmour's Do' & Don'ts which should have been attached to this email)

Specific Tips for Common Challenges: The Non-Verbal Client



Non-verbal or minimally verbal patients

Start with Quick Start Learning

- 1. Watch 1.0 all the way through on the first day. This will show your patient how Gemiini is used. It is actually a video modeling session to prime them for video modeling.
- 2. On the second day, watch the "Animal Sounds" video in Quick Start
- 3. Do one module each week. (i.e. module 2.0 in week 2, module 3.0 in week 3, etc.)
- 4. Clients often have their first expressive language in the "Game Mode", which is 6.0
- 5. After 6.0 there is no need to go in order. You can skip around according to a child's needs.

Note:

Modules are numbered 1.0, 2.0, 3.0 etc. If you are starting in the Spring of 2015, there may be some temporary sub modules that were used to accommodate slower international speeds, or to accommodate those in other countries who do not use ASL for signing. Ignore those sub-modules if you are in the US. If you are outside the US, you may find one that works for you. If 2.6 works for you, so will 3.6, 4.6, 5.6, et cetera.

Specific Tips for Common Challenges: The Scripting Client & The Echoing Client



For Scripters

Start Gemiini by showing the child the video for scripting

Use much more variety in videos to decrease the possibility of scripting. Some ideas:

- Change the order of words every day or so in the Edit Function
- Add or subtract words from a specific week's video to change the rhythm of the video
- Use two or three sessions in a week and alternate them

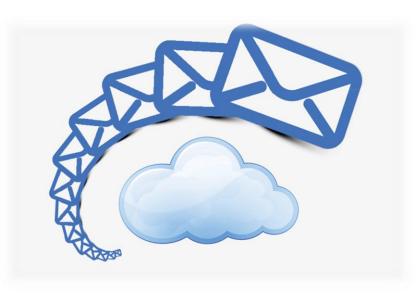
For Echolalic Clients

Use the "Echolalia Buster" video to start and ensure all caregivers/teachers/therapists in the clients life know the prompt.

Go through QuickStart Language to build receptive vocabulary. If they already have a good receptive vocabulary, pick and choose from the QuickStart modules to fill in words they may not know.

Soon after, use the "Tell me three things" videos. Interact with the client by asking him/her to tell you three things about something that can be seen in the room. Then move on to things you can think about.*

If a client begins to script, see "Scripters" section above.





Sample Email To Parents

To: Parent@parentemail.com

From: therapist@therapistemail.com

Dear Parent,

We have started using video modeling in our practice to teach new words, to improve articulation and to increase other social and academic skills. Video modeling has over thirty years of clinical research and it is considered an effective and evidence-based approach for children with special needs.

I wanted you to be aware that there is a new service that offers an online library of thousands of therapeutic videos that we can use to supplement what we are doing in therapy sessions. If you were to subscribe to this service, we would be able to make customized videos specifically for your child that teach the exact skills we are targeting in therapy sessions each week. These clinically overseen and custom videos would be a powerful tool for you to use at home. You would simply log into the site and press "play". Your child would then be front-loaded with skills which would give the child more confidence and us more fertile ground for what we do here.

The videos are very specifically filmed to strip away all distractions and focus ONLY on the word or skill being taught. Research suggests that gains may be seen in areas other than the specific subjects being taught in video modeling lessons. If you notice increased abilities in any area, please let us know and we will try to build on those new skills in therapy sessions.

IMPORTANT: The company that supplies this video program, Gemiini.Org, offers subscriptions on a need-based pricing structure so that no child or family will ever be turned down because of an inability to pay. If you do sign up, use this code: (*code will be provided to you*), and the company will make sure I have access to your child's account.

Site: www.gemiini.org

Sincerely,
[Therapist Name]

Basic Training

- √ Getting started/instructional videos
- √ Navigating Therapist/Student Logins
- ✓ Creating/Editing Custom Sessions
- ✓ Creating Assignments
- √ Tips



Getting a client started is as easy as 1-2-3:

You will have a therapist account already set up. From this account you can oversee a whole caseload of patients. You can also create and archive video therapy sessions that work with your approach.



You will give a parent a card with your access code and the Gemiini.org website. Along with basic sign up information



Once the parent signs up on the website, you will be able to link directly to that patient and design/assign videos from your own account.

All therapist accounts are free of charge.



When you get your username and password, you will be sent a link to a basic introductory video as well as a 30 minute "Content Guide". <u>It is imperative</u> that you view both of these. Without the overview of the content on the site, you will overlook many of the powerful tools available to you. Some tips:

- If you ever need to re-watch the Content Guide, it can be found by clicking on the yellow camera icon.
- There are short instructional videos found next to every button on the site



Short Instructional Vids for Each Button

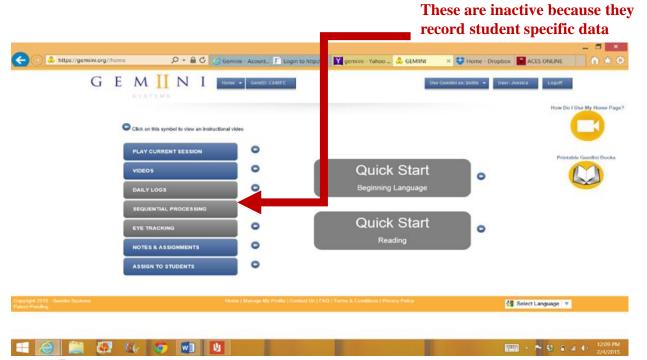


Navigating Student/Therapist Accounts

This is Critical to Understand

Gemiini is designed so that therapists can design customized plans. But it is also a site where students will watch videos. In early beta testing, we noticed that therapists often inadvertently created lesson plans for their practice in an individual client's account. The videos could then not be saved or transferred.

To stop this from happening, we have greyed out areas that are not needed for the role you are logged in under. If you are logged in as a therapist, you will see the screen below with the center three buttons greyed out.



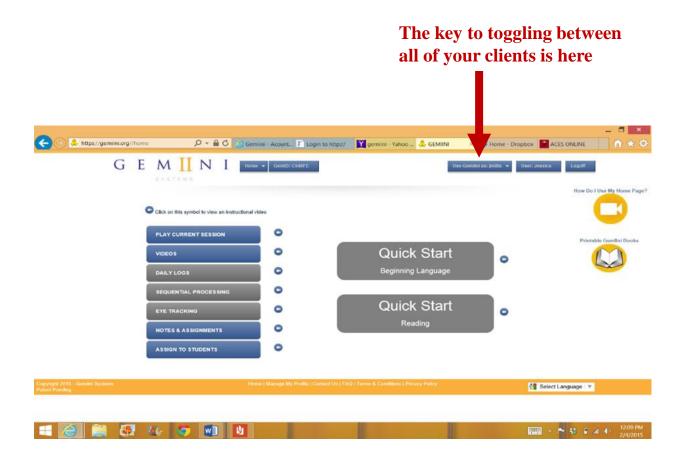




Navigating Student/Therapist Accounts

Switching between accounts / managing a caseload

You can manage an unlimited amount of clients from your caseload within Gemiini. You don't have to remember their individual logins—we've taken care of that for you. Just hover your cursor over the "Use Gemiini As" button, and a "View Students" option opens for you





Navigating Student/Therapist Accounts

Switching between accounts / managing a caseload (cont'd)

Once you click on the "View Students" tab, you will see a list of all of your clients with Gemiini accounts, and you can simply click on the button that says "View As"





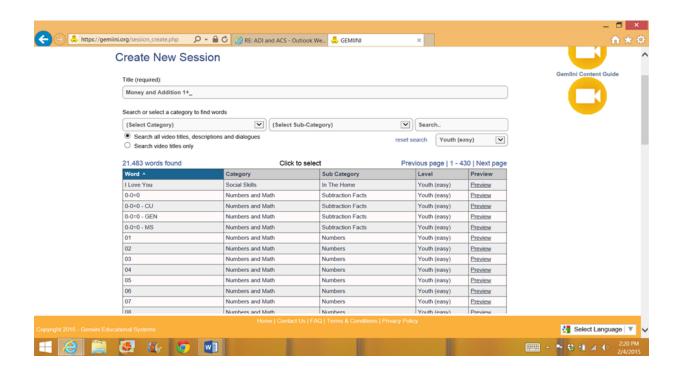
To get back to your therapist account just go back the "Use Gemiini As" button in the upper right hand corner



(the fun & creative part)

Gemiini is the most powerful when it is used to create any one of the billions of customized sessions you can make using its video toolbox. Just like in iTunes, you go into the library, and create a 'playlist' of short videos. You can rearrange them in anyway you like, whenever you like. Once you are done, Gemiini 'sews' these videos into one therapy video that the child can be shown anytime/ anywhere there is a computer, a tablet, or a smartphone.

Just click on the "Videos" button on the homepage, and then on the "Create Session" button. You will be brought to our online library:





Part One: Finding Content

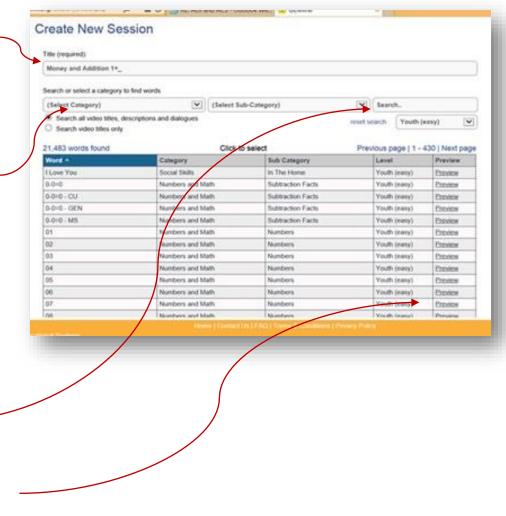
STEP-by-STEP

1. Give the session a title right here

2. Search the database using the categories to find targets and goals for your clients right here

3. Tip: if you can't find a video in the categories, try to just search for it here, as you would in Google.

4. You can preview any video with the 'preview' link





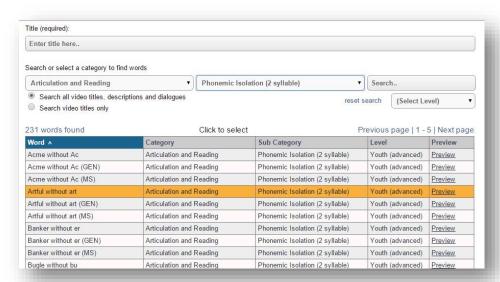
Part Two: Building Sessions

As you look through each category, you can simply click on a word you like, and it will drop to the bottom of the page to enter into your customized playlist. This is a screenshot of the "Phonemic Manipulation" subcategory of "Articulation". You can assemble a session using words from any category. We highly suggest you pepper a session liberally with humor videos as a positive reinforcer.

TIPS



- ✓ If you want to increase the generalization piece—or remove it—you can. The words labelled with "GEN" are additional generalization sub-pieces of each video. Just add another generalization in!
- ✓ Each header on the library is clickable to sort the videos by age of model or by degree of difficulty



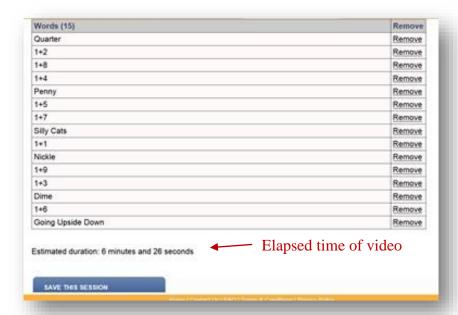


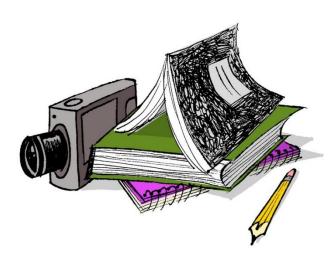
Part Two: Editing Playlists

We recommend you create a playlist that is 5-10 minutes long (the elapsed time can be found that the bottom of each playlist you make). Once you have your playlist done, you can edit it by dragging and dropping the videos into whatever order you like. You can also just hit the "Remove" button to remove a video from your list. You can do this at any time, even mid week to change things up. Resave it once you have edited a video and the student's account is immediately updated.

TIPS

- ✓ This is a math and money-oriented video. But notice that there are videos like "silly cats" and "going upside down" interspersed.
- You can re-access and re-edit videos at any time. Many therapists create a series of standard videos that they can then 'tweak' for individualization. You can also edit any standard "preselected session" Gemiini has created.

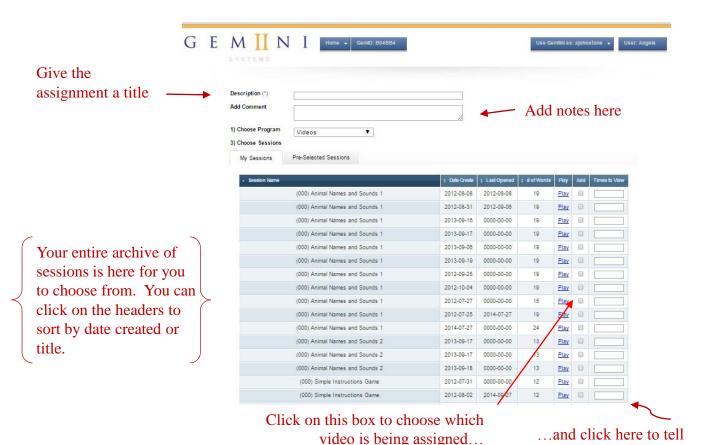


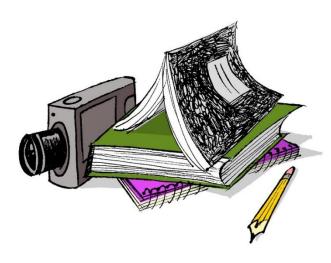


Therapy Homework

the student how many times to watch the video

Videos can easily be assigned to one or multiple children in your caseload. Just click on the "Assign to Students" button on the homepage and start. Once a therapy session is assigned to a client, they just have to log in and press play. It couldn't be easier!





ment

Assigning Videos

Therapy Homework

2013-08-23

2012-09-07

2012-09-08

2013-10-24

2012-08-27

0000-00-00

0000-00-00

0000-00-00

0000-00-00

...and click here to

finalize the assignment

and send it to clients

Your whole caseload is listed right below your archived sessions. Just click the box(es) for student(s) getting this particular assignment and then press the "assign" button at the bottom.

a1

AAOP

Abby's Irregular Past Tense practice

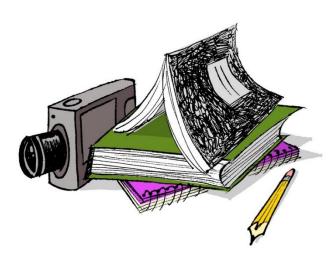
Click on these boxes to pick which

students will receive this

assignment...

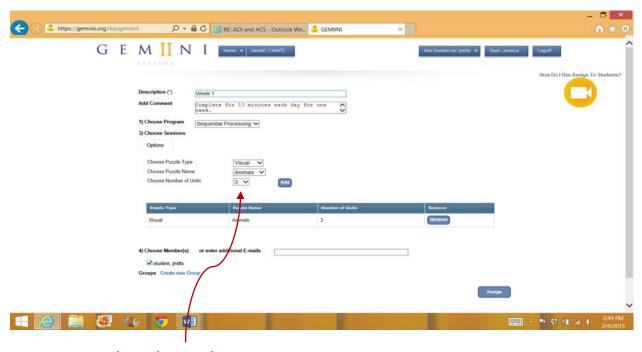
aces 2014-09-17 0000-00-00 ACES TEST 2014-09-19 0000-00-00 2013-05-30 0000-00-00 18 Action words Addition Facts 1's and 2's 2013-02-21 0000-00-00 Page 1 of 4 4) Choose Member(s) or enter additional E-mails , ayoung 🗷 , amartin , barackobama , blee , cdavis , chloec , bharris , btaylor , ckent , clewis , danderson 🗷 , djackson , eallen , eivanov , EuniceO 🗎 , fmoore gbrown 🗎 , ghall , gmartinez , hmiller , hsmith Smith, Johnny Smith, Johnny , lclark , juanitaz , jwalker Studnet, Marianella , mwilliams , nking , nwhite , pivanov , rgarcia , gjohnson Greene, Sara , ShaanD , snick , srobinson , ssummers baker, tammy , test4 , stjohn , stjohn7 baker, tammy , test6 , tivanov , twilson , vthompson , wjones , xcagigas , xthomas Groups Create new Group articulation group (r & I) + expand Edit group delayed speech + expand Edit group non-verbal + expand Edit group Spanish + expand Edit group ☐ Total Class + expand Edit group

Your entire caseload is here. You can even group them for sending bulk group assignments. Create and edit your groups at will.

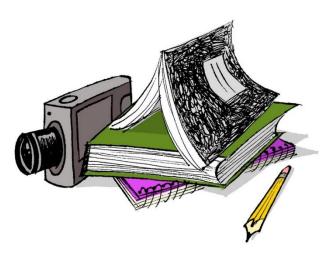


Sequential Processing

To assign Sequential Processing for 10 minutes per day as recommended, select it from the Assign to Students tab and then Choose program, select the 3 Options, click Add, check the box to Choose the Member(s), and click Assign to assign session to a client.

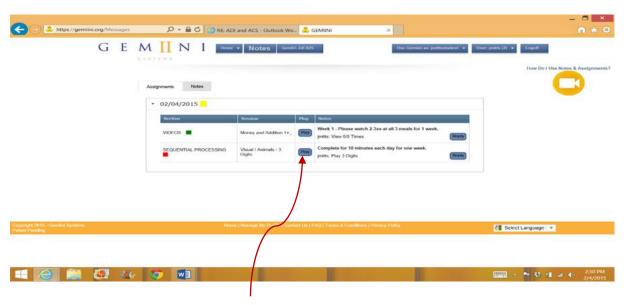


...the options are here.

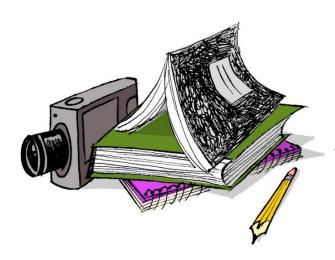


Client View

When the client clicks on Notes and Assignments on their Home Menu and clicks the date, they will see the session(s) you have assigned them along with colors indicating their progress (e.g., yellow = in progress, red = not started, and green = completed). The client can now press Play to begin the session.



...they just have to press "play"



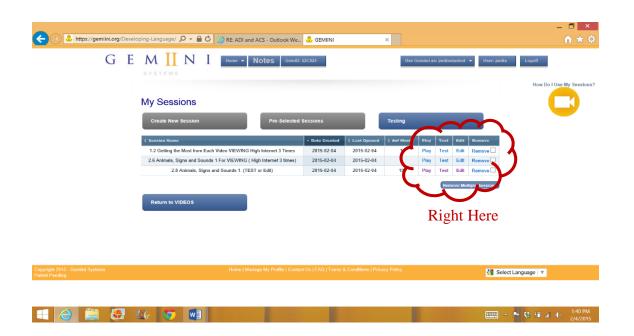
Client View

Once you have created sessions, every session listed under your My Sessions tab will have 4 options:

<u>Play</u> – Allows you to play the video

<u>Test</u> – Allows you to test the client by asking, "What is it?" or "What does a ____ say?" You can then click correct/incorrect based on the client's answer to determine if the client is retaining the information accurately.

 \underline{Edit} – Allows you to add in other videos/targets within the session \underline{Remove} – Allows you to remove the session completely



Appendix A

The Science Behind GemIIni

- **p.** A1 General Research on Video Modeling
- pp. A2-A4 Specific Research on GemIIni



The Overwhelming Academic & Clinical Support for Video Modeling

(Clinical trials on Gemiini are on the following page)



There are over thirty years of research and over 130 studies showing that video modeling is effective for the treatment of autism and Down Syndrome. Studies show—surprisingly for many—that video modeling outperforms the results of live one-to-one therapy for children for several commonly taught skills such as word identification, intra-verbal skills, and life/vocational skills. The attachment called "*TEA Report on Video Modeling*" was done by the state of Texas and it gives a great overview of the research to date.

In the United States, video modeling is accepted as "Established" and "Effective" by the rigorous National Autism Standards Report. Many school districts are currently paying for autism services that have not yet met the NASR's very stringent criteria for an "Established" intervention, but are listed as "Emerging" instead (such as PECS training).

The top researchers in the field have often stated in published articles, point-blank, that video modeling is preferable to *in-vivo* modeling for many tasks. The idea that a heavily research-based intervention could made widely available at no cost should be intriguing to administrators and exciting to teachers. It is also for therapists, because video modeling can replace the portions of therapy (namely the repetitive portions of session agendas and the widespread use of flashcards) that kids and adults tire of quickly. In fact, in head-to-head studies, video therapy has consistently delivered better outcomes (Charlop, 1989; Biederman 1999 and others) than a "live" therapist could for these tasks. If an argument is to be made based on the research, it would be that *in-vivo* therapy is not the most evidence based intervention available for certain tasks and skills. Put simply, GemIIni allows computers to do what they do best (repetitive drilling) and lets teachers/therapists to do what they do best (improve socialization and generalization skills).

To date, video modeling has not been in widespread use because the efficiencies of using video instruction were offset by the cost of making customized video therapy sessions for every child. That has changed with GemIIni. We have created an online video library of nearly 15,000 therapeutic video elements so teachers can now create custom playlists on the web in minutes. They can then use these customized video sessions in class, or—better yet--assign individualized video therapy-homework sessions to students to work on at home.











GemIIni-Specific Science

GemIIni has made two significant breakthroughs in special education. First, we created a platform with thousands of videos that makes the established efficacy of video modeling therapy available to students via the internet. It is the only such service in the world.

In addition to that technological breakthrough, GemIIni has created a therapeutic filming technique that improves upon basic video modeling. We have peer-reviewed clinical studies to show that improvement. While such an advance is wonderful news for families, it is important to remember that even plain-vanilla video modeling is shown in research to be better than live one-to-one therapy in research. GemIIni's clinical results just make a great thing better.

We have the following clinically trials, specifically using GemIIni and GemIIni's new DVM filming technique:

- Researchers from the internationally respected Eden Center in NJ collaborated with the Director of Clinical Psychology at Princeton and two others to study GemIIni's effect on teaching adolescents, with great results. That study, "Video Modeling and Word Identification..." was published in Child Language Teaching & Therapy in January 2014, and an abstract follows on the next page.
- A professor from Portland State University ran a double blind group study in California Public Schools using GemIIni during circle time to teach ESY students basic labeling. Results showed GemIIni taught over three times faster than standard video modeling and will be published in the March 2015 *Journal of Special Education Technology*.
- Researchers from Portland State and Gonzaga University ran a clinical trial in Spokane, WA public schools which showed unexpectedly large word gains across all disabilities and all language levels, including expressive word gains among previously non-verbal students. The study is in peer review.

Advances in teaching that are easier to implement, less expensive to provide and more effective in outcomes are rare. To have such an advance in an area of such massive and desperate need is something our team is excited to share with teachers around the United States and the world. Please know that we allow teachers and schools to access any child's personal account for free.



Video modeling and word identification in adolescents with Autism Spectrum Disorder

(Clinical Trial Using GemIIni)

Morlock, Reynolds, Fisher, Comer** (2014)

**Note: Dr. Comer is the Director of Clinical Psychology at Princeton

ABSTRACT

"Video modeling involves the learner viewing videos of a model demonstrating a target skill. According to the National Professional Development Center on Autism Spectrum Disorders (2011), video modeling is an evidenced-based intervention for individuals with Autism Spectrum Disorder (ASD) in elementary through middle school. Little research exists evaluating video modeling for individuals with ASD in high school. This study examined the effectiveness of video modeling to facilitate the development of word recognition and pronunciation in three male high school students with ASD. A single-case multiple baseline experimental design across participants (i.e. video modeling sequentially implemented across three students) was used to evaluate the effectiveness of video modeling. Results indicate that video modeling was effective in facilitating word recognition and pronunciation. Findings suggest that video modeling may be a viable intervention to foster the reading development of adolescents with ASD"

SUMMARY & HIGHLIGHTS

Use of GemIIni. GemIIni videos were the only videos used in this study

Social Validity. "[F]ollowing the intervention all of the students were asked, 'Did you like watching the videos?' and 'Would you like to watch videos again to learn new words?' All participants responded in the affirmative to both questions."

Findings. "[This study] extends the literature by demonstrating an effect for video modeling in teaching word recognition and pronunciation to adolescents with ASD.

- "All three participants improved and maintained accuracy scores during the follow-up phase as compared to the baseline phase for both target behaviors (i.e. word recognition and word pronunciation)"
- "This study provides support for the use of video modeling to teach basic reading recognition skills to adolescents with ASD"
- "Results of this study suggest that teachers and educators can use video modeling to target reading skills".
- "All participants' word pronunciation accuracy increased between baseline and intervention, and baseline and follow-up"

LINK TO STUDY



Comparing the Teaching Efficacy of Two Video Modeling Programs Delivered in a Group Format in Special Education Classrooms to Improve Expressive Language

Wynne* (2015)

*Dr. Maria Wynne directs the BCBA program at Portland State University

ABSTRACT

"The current study evaluated the effectiveness of two video modeling programs, one using discrete video modeling and another using standard video modeling to teach expressive vocabulary words to individuals with autism and other disorders. The researchers collected data across four classrooms in a school district in Inglewood, California in a double-blind study across three weeks. During week one, baseline data were collected across two sets of targets presented in each video modeling program. During week two, the instructors showed the standard video modeling program to half of the classrooms while instructors for the other half of the classes showed the discrete video modeling program. During week three, the instructors switched the video modeling programs with the two groups to compare the language acquisition outcomes. The researchers collected data on all targets at the end of each week's viewings. Comparing the two programs using chi-square tests of independence, the research showed a significant increase in expressive words with the discrete video modeling program.

SUMMARY & HIGHLIGHTS

The researcher performed a double-blind study of 31 students with special needs in a Los Angeles county public school to determine if GemIIni's Discrete Video Modeling improved outcomes in language acquisition when compared to standard video modeling. Groups received both standard video modeling and discrete video modeling on alternating weeks. GemIIni's videos produced language gains in each group that were more than triple the language gains by that same group when exposed to standard video modeling sessions. Results were deemed to be highly statistically significant.

QUOTATIONS

"Given the real-world constraints of the time and budgetary pressures facing teachers and administrators, effective, evidence-based interventions that are easy to use and systemically sustainable are the most likely to be widely adopted (Strain, Schwartz & Barton, 2011). Furthermore, clinicians may model skills through the use of video as opposed to modeling skills live because videotaped models are not as labor-intensive as an instructional tool (Biederman, Stepaniuk, Davey, Raven & Ahn, 1999)."

"The research shows that exposure to DVM, as compared to SVM, resulted in more rapid language acquisition. Students' increase in expressive words associated with DVM exhibited statistically significant increases in language skills as compared to SVM. Other skills such as increased compliance to testing were also noted in behavior observations associated with DVM exposure."

"The results of this study are promising because they imply that minimally invasive, low cost interventions can significantly improve language of children with autism and other disabilities in special education classrooms."

LINK TO STUDY

[study will be published in the March 2015 issue of the Journal of Special Education Technology]