

be a part of our NATIONAL TRYOUT TEAM



JOIN OUR NATIONAL TRY-OUT TEAM: Fine Motor Speed & Accuracy Test (FMSAT)

Are you a pediatric OT or OTA ready to join our National Try-Out Team? We're looking for clinicians who want to contribute to evidence-based practice while gaining extended access to O.T. Wizard's comprehensive assessment platform. We are "trying out" the FMSAT. Get CEU credits for doing something fun!

About the FMSAT

We are inviting occupational therapy practitioners to participate in national data collection for the Fine Motor Speed and Accuracy Test (FMSAT), a brief bilateral fine motor task embedded in the O.T. Wizard clinical intelligence system for pediatric OTP's.

The FMSAT is a 60-second paper-and-pencil task in which test takers use a sharpened pencil to pop small circles on a worksheet placed over craft foam, completed once with each hand. The task is named for its observable performance dimensions "speed and accuracy", but those scores are the vehicle, not the destination. What the FMSAT is designed to measure is neuromotor laterality: the degree to which an individual has developed dominant-hand specialization, and how that specialization compares to expected patterns for their age. The two-hand format is intentional; it is the relationship between the scores, not either score alone, that carries the primary clinical signal. The task is easy to administer, requires no specialized equipment, and fits naturally into a standard evaluation or therapy session.

All you need is a printed worksheet, a piece of craft foam, and two sharpened full-length number 2 pencils. Administration training is provided via a 5-minute instructional video and the worksheet and written instructions are available as a free download. [See the FMSAT in action.](#)

Age Range: 3 years- up

This work has been reviewed by Pearl IRB (IRB ID 2026-0154) and determined not to constitute human subjects research under DHHS and FDA regulations, allowing assessment development and validation activities to proceed without ongoing IRB oversight. [IRB : Formal determination letter that this research not require it](#)

Name: _____

Fine Motor Speed & Accuracy Test (FMSAT)

Use your pencil to peg for all the bubbles. Do not peg the bubbles with an "X". Do as fast as you can until I say stop.

Hand 1: $\frac{S}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R}$ / 80 / 20

Hand 2: $\frac{S}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R} / \frac{L}{L} / \frac{R}{R}$ / 80 / 20

Adult demonstrator: Do not score. Student practice hand 1: Do not score. Student practice hand 2: Do not score.

Hand 1: 50 seconds per section - stop "X" bubbles

Hand 2: 50 seconds per section - stop "X" bubbles

O.T. Wizard ©2025 | 12

What the Data Shows So Far

To date (3/30/2026) we have collected data from 760 preschool-aged children (ages 3:00 through 5:05), predominantly a referred clinical population in North Carolina. Preliminary internal analysis shows that the dominant hand FMSAT score correlates with other fine motor and functional performance indicators at moderate to large effect sizes across gross motor, VMI, visual perception, executive functioning, ADL, and participation domains. These are exploratory findings from an unvalidated platform and should be interpreted as hypotheses about developmental coherence rather than validity evidence -- which is precisely why independent normative and clinical data from outside this system is needed. Longitudinal paired data from 130 children also shows that the dominant hand gains significantly faster than the non-dominant hand over a mean interval of 5.2 months, with the performance gap widening in 67% of children, providing early within-child evidence of hand specialization trajectories during the critical preschool window.

Why We Need More Data

We are accepting both clinical and normative data samples. Clinical data collected from your existing caseload will be used to establish eligibility thresholds — identifying the score points below which children in a given age band are highly likely to present with fine motor deficits significant enough to warrant a full evaluation. This gives OTs objective, data-backed language for justifying referrals, supporting IEP eligibility decisions, and defending service frequency to administrators and payers. Normative data collected from non-referred general education settings will establish the general population comparison layer, allowing scores to be interpreted against both a clinical reference distribution and a typical developing peer group simultaneously.

To build stable percentile distributions and defensible eligibility thresholds we need 100 to 200 records per age band in 3-month increments from ages 3:06 through at least 7:11. We are particularly in need of data from children ages 5:00 and older, where our current sample is limited. It would be great to get some adult aged data as well.

How to Participate — Clinical Caseload Data

If you are already working with a child /client you do not need any additional consent or parent communication. The FMSAT is indistinguishable from a therapy activity and fits naturally into any fine motor session. Simply run the task, record the scores, and submit via the Google Form. Use it as an activity, but follow the directions. That is it. The FMSAT should be given prior to other fine motor activities so that the hands are not fatigued. A therapist with an active caseload can contribute multiple records per week with no disruption to existing workflow.

How to Participate — Community Screening Data

For therapists with access to general education preschools, kindergarten roundups, health fairs, or community screening events, normative data submissions are equally valuable. In these settings where a formal therapy relationship does not exist, simply introduce the task as a brief clinical observation: "I am going to do a quick pencil activity to observe how your child holds their pencil, which hand they prefer, and how they coordinate their fingers." No score reporting is required — the therapist gains meaningful clinical observations about grasp, hand selection, and bilateral coordination to share with families narratively, and the submitted data contributes directly to building the general population reference layer.

Data Submission

Data is submitted via a brief Google Form requiring your email, client initials, month and year of birth, assessment date, dominant and non-dominant hand scores, hand used for each trial, task validity confirmation, and a single classification question about special education or therapy service status. HIPAA and FERPA compliant- no other data is entered other than the initials and MM/YYYY of birth. Month and year of birth is compliant for HIPAA and therefore it's not possible to identify a person through the data that is entered.

Contributor CEU

AOTA and many states view participating in research as valid toward CEU credit. For every 12 FMSAT's and FMPRS that you complete and submit, you will be awarded 1.0 CEU and with a certificate. No partial credits given. CEU's certificates will be awarded by June 10th for submissions through May 31st (the expected end date). **It is up to each participant to verify if their state board accepts CEU credit. The hours would generally be considered "research" oriented. **We are not an approved AOTA CEU provider, however, many states do not require that.** Even if you can't get CEU credit, consider participating and contributing to research.**

Contributor Recognition

Contributing therapists and organizations will be recognized on the O.T. Wizard research contributor page and will receive first notification of research findings and product availability once the FMSAT has been fully normed. Recognition is tiered based on total submissions:

Contributor: 5 or more submissions. Listed by name on the O.T. Wizard research contributor page.

Research Partner: 25 or more submissions. Listed by name on the O.T. Wizard research contributor page.

Lead Contributor: 50 or more submissions.

Contributing Organization: 50 or more submissions from a single practice, school district, or therapy group with at least 3 contributing therapists. Organization name listed alongside individual contributors.

Who We Are Looking For

OT/Ls, OTA's and fieldwork students: If you work in a school-based setting, early intervention, outpatient, SNF's, or have access to community screening opportunities, your data is needed. If you are an OT faculty member with students completing community placements, this is an ideal structured data collection opportunity

that supports both student learning and a growing national evidence base for pediatric fine motor assessment. Test your spouse, kids, parents, grandparents and friends (as long as you keep administrative standardized).

To indicate your interest, fill out the [Try out Team Interest Form](#). **If you don't get an email from me, then look in your spam box, or reach out to me directly. It may be best to add a personal email address to the form (for preferred) so that I have a secondary way to reach you. **

Stephanie Seymore Wick, MSOT, OT/L

stephanie@learningcharms.com

Founder and Clinical Architect, O.T. Wizard /Learning Charms, Inc., Charlotte, NC

Interested in seeing current research and data for the FMSAT? [Read the article here](#) or View the [Expanded Analysis](#).

Questions and Answers

Administration

Q: Do I still need to do the demo and practice even if the test taker understands how to do it?

A: Yes, because this is part of the standardization process

Q: I had two sharpened pencils. The child broke both pencil leads during the test and then struggled afterwards to get the bubble “pops”.

A: Have extra pencils available, but in that case, don't input the score. Wait 1-2 weeks and then retest the child . If all goes well, add the new scores only to the google form.

Q: Are there any people that shouldn't be included in these trials

A: Any person that doesn't demonstrate understanding of the task should not be tested, or should be marked at the end as “no- did not understand directions”. You can usually get a sense for this in the demonstration and practice sections. Any person with visual processing difficulties or low vision shouldn't be tested.

Q: What patients/students should be tested?

A: We are looking for both clinical (your caseload and those with conditions that impair development) and normative samples (general population) of ages 3 and up. We are mostly interested in ages 5 and older. Although our primary focus is pediatrics, we would like some data for adults across the lifespan so we can see if the FMSAT has significance in adulthood or later years.

Q: Can the test taker pop the “bubbles” in any order (left to right, random order, etc)?

A: As long as the hand that is being tested in popping bubbles in the designated area, they can pop bubbles in any order they want.

Scoring

Q: What if the test taker just dots the circle, but it doesn't puncture it?

A: This would not count as a point. It has to puncture through the paper

Q: My student punctured holes outside of the bubbles. Do I count off for those?

A: Only give credit for the bubbles (circles) that had a puncture clearly inside or touching the circle's edge. No penalty for popping outside of the circles.

Q: My student punctured 3 holes inside the same circle. Do they get 3 points for that?

A: No, max of 1 point per circle popped.