

Vb mapp milestones list

This article has multiple issues. Please help improve it or discuss these issues on the talk page. (Learn how and when to remove these template messages) This article is an orphan, as no other articles link to it. Please introduce links to this page from related articles; try the Find link tool for suggestions. (July 2022) This article heads additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.Find sources: "Verbal Behavior Milestones Assessment and Placement ProgramPurposeasses scholar - PJSTOR (November 2013) (Learn how and when to remove this template message) verbal Behavior Milestones Assessment and Placement ProgramPurposeasses in children with autism or other developmental disabilities. A strong focus of the VB-MAPP is language and social skills of children with autism. Development The VB-MAPP is language and social interaction, which are the predominant areas of weakness in children with autism. Development The VB-MAPP is language and social shills of children with autism. A contributing author to the VB-MAPP was developed by Mark Sundberg, Ph.D., BCBA-D and is a continuation of the author's 30+ year research in language assessment and intervention as it applies to individuals with autism. A contributing author to the VB-MAPP is Barbara Esch, Ph.D., CCC-SLP, BCBA-D, a speech and language pathologist who includes an assessment of speech sounds with a guide for developmental disabilities, but can also be used for children who demonstrated delays in language development. It is intended to be used for children who have training in applied behavior stars strong behaviors that might impede language and social development. In enversion and special educators to assessment help to prioritize intervention needs, provide feedback to parents and other professional, guide curriculum planarity used by helawior stars and other professional and uses of applied behavior analysis (ABA) and is primarily used by ehe



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The milestones are broken into three developmental levels
Level 1: 0-18 months
Level 2: 18-30 months
Level 3: 30-48 months
The scores for each skill are approximately balanced across each level
There are 5 items and 5 possible points for each skill area

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Transition Assessment. Focuses on 170 milestones Assessment. Focuses on 170 milestones that support the development and assessment. Barriers and addit assessment. Barriers and a overview disking - Acketkist of skills tracking - A checkist of a second skill tracking - A checkist of a skill tracking - A checkist of a skill tracking - A checkist of a skill tracking - A checkist of skills - A checkist of a second skill tracking - A checkist of a skill tracking - A checkist of a second skill - A checkist of a skill - A checkist of skills - A check



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12-14	circumstances (e.g., Please stop pushing me. No thank you. Excuse me, can you move?) (E)
13-a	Spontaneously mands to use the bathroom 2 times (O)
13-b	Mands for others to attend to his own nonverbal behavior 2 times (e.g., watch me) (O)
13-c	Mands for others to attend to some aspect of the environment 2 times (e.g., Look, it's a truck.) (O)
13-d	Mands with 2 different adjectives (e.g., I want the red gummy bear.) (O)
13-0	Mands with 2 different prepositions (e.g., Put it in the house.) (O)
13.1	Mands with 2 different adverbs (e.g. Slow down.) (O)
13-M	Mands with 10 different adjectives, prepositions, or adverbs (e.g., My croyon is broken. Don't take it out. Go fast.) (TO: 60 min.)
14-a	Mands for sympathy or other emotional support 2 times (e.g., He's mean.) (O)
14-b	Mands for others to deliver a specific object to another person 2 times (e.g., Give it to Sorah.) (E)
14-c	Mands for instructions for completing a task 2 times (e.g., Where does it go? How do I do it?) (O)
14-d	Spontaneously mands with 3 different major parts of speech (e.g., noun-verb-adjective) in one sentence 2 times (e.g., Push the big bike fast.) (O)
14-M	Gives directions, instructions, or explanations as to how to do something or how to participate in an activity 5 times (e.g., You put the give on first, then stick it. You sit here while I get a book.) (O)
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Capyright	© 2008 Merk L Sundhog VB-HAPP Task Analysis and Skills Tracking Level 3 57

Development The VB-MAPP is based on the principles and procedures of applied behavior analysis (ABA), B.F. Skinner's behavioral analysis of language, verbal behavior and establishment of developmental milestones. The VB-MAPP was developed by Mark Sundberg, Ph.D., BCBA-D and is a continuation of the author's 30+ year research in language assessment and intervention as it applies to individuals with autism. A contributing author to the VB-MAPP is Barbara Esch, Ph.D., CCC-SLP, BCBA-D, a speech and language pathologist who includes an assessment of speech sounds with a guide for developmental progression called the Early Echoic Skills Assessment (EESA). Usage The VB-MAPP is most commonly used to assess individuals with autism and other developmental disabilities, but can also be used for children who demonstrated delays in language development.

It is intended to be used by individuals who have training in applied behavior analysis (ABA) and is primarily used by behavior analysts, speech-language pathologists, school psychologists, and special educators to assess strengths and weaknesses in skills and behaviors that might impede language and social development. The results of assessment help to prioritize intervention needs, provide feedback to parents and other professionals, guide curriculum planning and track skill acquisition. Features The VB-MAPP are: Milestones Assessment: Focuses on 170 milestones that serve as the foundation of language, learning and social development. Barriers Assessment: Focuses on barriers that may impede the acquisition of new skills. <u>fatucapi</u> Transition Assessment: Serves as a guide for planning the child's educational needs. Task Analysis and Skills Tracking: A checklist of skills that support the developmental milestones and can be used for daily curriculum activities and skill tracking.

Users Guide provides the scoring criteria, examples, tips for the tester and an overview of Skinner's analysis of verbal behavior. Included are placement and Individualized Education Program goals to establish intervention and curriculum priorities that are measurable, meaningful and manageable. The Milestones Assessment is broken down into three levels. [1] Level 1 (0-18 Months) Level 2 (18-30 Months) Level 3 (30-48 Months) Level 2 (18-30 Months) Level 2 (18-30 Months) Level 2 (18-30 Months) Level 3 (30-48 Months) Level 3 (30-48 Months) Level 3 (30-48 Months) Level 2 (18-30 Months) Level 3 (30-48 Months) Level 3

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Level 2 adds Listener Responding by Function Feature and Class, Intraverbal, Classroom Routines and Group Skills, Linguistic Structure. vutixitu

Level 3 adds Reading, Writing, and Mathematics. Measurement criteria The VB-MAPP has objective measurement criteria that makes it effective for use in both treatment and research outcomes, as demonstrated in studies in the Journal of Applied Behavior Analysis, The Analysis of Verbal Behavior and Education and Treatment of Young Children. Comparison to other assessments A study by Esch, LaLonde and Esch J.W. in 2010, reviewed 28 commonly used assessment for the treatment of autism and concluded, "Most speech-language assessments in widespread use today evaluate response topographies (forms of responses) alone, without regard for a functional analysis of the causal variables" (p. 166.) For example, 26 of the 28 assessment programs reviewed failed to provide a measure of a student's ability to mand. tami These authors point out that the VB-MAPP contains a functional analysis of language, including a mand assessment component.[2] A similar study by Gould, Dixon, Najdowski, Smith and Tarbox in 2011 compares 30 assessments, including the ABLLS-R, Bayley, Brigance ... and the VB-MAPP. The authors reviewed the 30 assessments for: comprehension, targets child development, considers behavior function and not just topography, link from the assessment to curricula targets and useful for tracking child progress over time. The authors concluded: "After reviewing the assessments described above, only four meet our five criteria most closely: the VB-MAPP, Brigance IED-II, VABSII and CIBS-R."[3] Use in research The VB-MAPP has been used as a measurement tool in published studies to measure the participants' verbal or social skills: Charania, S.M. LeBlanc, L.A., Sabanathan, Narmatha, Ktaetch, I.A., Carr, J.E., & Gunby, K., (2010). <u>ciwedujajusi</u> Teaching effective hand raising to children with autism during group instruction. <u>potifihapiru</u> Journal of Applied Behavior Analysis, 43, 493-497. Esch, B.E., LaLonde, K.B.,& Esch J.W. (2010). <u>wazijurezi</u>



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ISSN 1750-9467. External links Association for Behavioral Analysis International Archive of the Analysis of Verbal Behavior Journal Association for Science in Autism Treatment - an organization that provides information regarding effective treatment for individuals with a diagnosis of autism spectrum disorders Autism Resource- Glossary of Terms AVB Press- publisher and distributor of the VB-MAPP. Behavior Analysis Certification Board B.F. Skinner Foundation - promotes the science founded by B. F. Skinner and supports the practices derived from that science. Cambridge Center for Behavioral Studies energed information regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Certification Board B.F. Skinner and supports the practices derived from that science. Cambridge Center for Behavioral Studies energed in Common regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Center for Behavioral Studies energed in Common regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Center for Behavioral Apple Center for Behavioral Studies energed in Common regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Center for Behavioral Analysis Provides information regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Center for Behavioral Apple Center for Behavioral Studies energed in Common regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Provides information regarding effective treatment for individuals with a diagnosis of autism spectrum Mark Sundberg Behavior Analysis Center for Behavioral Apple Center for Behavioral Apple Center for Behavioral Studies energe Pathology and Applied Behavior Analysis Special Interest Brounds in the provides information regarding Behavior A

The BST intervention resulted in immediate increases in performance for both participants. Keywords: Behavioral skills training, Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) is a five-component program designed to measure verbal behavior, guide individualized instruction needed to address deficits in verbal behavior, and evaluate progress over the course of a treatment program (Sundberg 2008). The assessment is used to evaluate performance on Skinner's (1957) verbal operants across a number of tasks. The milestones assessment is divided into three developmental levels (0-18, 18-30, and 30-48 months), based on the attainment of developmental milestones by typically developing children. The current study focused on levels 1 and 2 of the milestones assessment includes the evaluation of early mand, tact, listener, social, visual-perceptual and match-to-sample, independent play, motor imitation, and echoic skills, as well as spontaneous vocal behavior) as well as an evaluation of listener responding by function, feature, and class, intraverbals, classroom/group routines, and linguistic skills (see Sundberg 2008). Level 3 expands on the skills targeted in level 2 and assesses pre-academic behaviors in reading, math, and writing. The VB-MAPP is a tool that can be used in a variety of settings with any number of clinical populations (Sundberg 2008).

Many educational settings use the instrument to establish language goals and objectives for individuals with autism spectrum disorder and other developmental disabilities. As with all tools and protocols, the results of the VB-MAPP will only be meaningful if the assessment is conducted by professionals who are skilled in its administration. Unlike many other language assessments, the VB-MAPP requires that administrators are familiar with Skinner's (1957) analysis of verbal behavior and basic assessment environment and assess the verbal operants. Without an understanding of Skinner's (1957) analysis of verbal behavior, an individual may mistake one operant for another based on formal similarity. Table 1 provides examples of verbal operants in which the response topography, saying "train," is the same, but the type of operant is different as evidenced by the antecedents and consequences. Understanding the environment-behavior relations is also important for distinguishing between operants in which the responses are functionally similar, but topographically different. probe that have similar antecedents and consequences, but are different topographically and are assumed to be functionally independent responses. These examples underscore the need to ensure that those implementing the VB-MAPP are adequately trained in the behavior-analytic skills necessary to conduct the assessment. An example of verbal operants that are formally the same, but have different antecedent controlling variables and are maintained by different consequences/verbal operant/praiseMandProviding a track with no traina "Train" Access to a trainTactA picture scene with a train "Train" Nonspecific reinforcement/praiseIntraverbal "What goes choo choo?" "Train" Nonspecific reinforcement/praiseAn example of different, but have similar antecedent controlling variables and are maintained by similar consequences Verbal operantAntecedentResponseConsequenceListener responding by feature, function, class"Where do you sleep?" with a picture scene (or other visual) presentPoints to a bedNonspecific reinforcement/praiseThe VB-MAPP manual and guide (Sundberg 2008) provides some instruction on how to implement the milestones assessment; however, it is unclear if the instructions are sufficient for conducting the assessment successfully, or with fidelity. Previous research has shown that when a manual is specifically designed to teach a skill, it may be an effective method for establishing the repertoire. For example, Miltenberger and Fuqua (1985) evaluated the effectiveness of both an instructional manual and behavioral skills training on the acquisition of behavioral interviewing skills. According to these results, it is possible that the written instructional methods were equally successful in teaching the target skills. 2008) are sufficient to teach professionals to administer the assessment. Alternatively, if written instructions are not sufficient in teaching (BST; Miltenberger 2008) may be an effective instructional method. BST consists of four components as follows: instructions, modeling, rehearsal, and feedback, and has repeatedly been demonstrated as an effective method for teaching a variety of clinical skills to paraprofessional staff and students (e.g., Rosales et al. (2000) demonstrated the efficacy of a modified BST procedure when teaching undergraduates to implement functional analyses. The BST procedure consisted of group instructional analysis conditions. Similar results have been demonstrated when using BST to teach special education teachers the skills required for discrete-trial teaching (Sarokoff and Sturmey 2004). Behavioral skills training included instruction with written descriptions, modeling, rehearsal, and feedback. Prior to the intervention, the participants' mean performance was below 50 % accuracy. Following BST, mean performance for all participants improved to above 95 %. Rosales et al. (2009) used BST to teach two undergraduate and one graduate student to implement the Picture Exchange Communication System (PECS). The BST package consisted of verbal and written instruction, a quiz, role rehearsal, video simulations, modeling, and corrective feedback. Following instruction, all three participants successfully implemented phases 1-3 of PECS with confederate learners. Furthermore, results of these studies suggest that BST is an effective instructional method for the acquisition of skills relevant to complex behavior technologies when written instruction alone is not sufficient. Accurate administration of the VB-MAPP is important so that appropriate goals and objectives can be targeted for language instruction. In addition to consuming the written instruction that is provided in the VB-MAPP guide, individuals interested in administering the assessment can attend VB-MAPP workshops. However, to date, the efficacy of these strategies for teaching others to administer the assessment has not been explored. As the assessment grows in popularity, it is the responsibility of the professional community to ensure that those who will be administering the assessment are taught to run it with fidelity. The first step in ensuring that professionals are taught to conduct the assessment are taught to run it with fidelity. effects of behavioral skills training on implementation of levels 1 and 2 of the VB-MAPP milestones assessment. Two school psychologists, Lucy and Ethel had 22 and 17 years, respectively, of experience assessing children with disabilities using a variety of standardized assessments. Examples of the assessments that Ethel regularly conducted include the Wechsler Intelligence Scale for Children®-Fourth Edition (Wechsler 2003), Stanford-Binet Intelligence Scales-Fifth Edition (Wechsler 2003), Woodcock-Johnson® III (McGrew 2001), Gray Oral Reading Test-Fourth Edition (Wechsler 2003), Stanford-Binet Intelligence Scales-Fifth Edition (Wechsler 2003), Woodcock-Johnson® III (McGrew 2001), Gray Oral Reading Test-Fourth Edition (Wechsler 2003), Stanford-Binet Intelligence Scales-Fifth Edition (Wechsler 2003), Stanford-Binet Intelligence S Edition (Kaufman and Kaufman 2004), Gilliam Autism Rating Scales—Second Edition (Gilliam 2001), and the Adaptive Behavior Assessment System®—Second Edition (Harrison and Oakland 2003).

Lucy regularly conducted the aforementioned assessments and also had experience administering the Autism Diagnostic Observation Schedule—Generic (ADOS; Lord et al. 2000).

Neither participant had administered a VB-MAPP prior to participating in the study. Both participants had a basic understanding of behavior analysis and were completing the coursework necessary to sit for the Behavior Analysis Certification Board[©] examination.

A basic overview of the verbal operants was included in the coursework that the participants completed prior to their involvement in the study. This overview consisted of definitions and examples of each of the verbal operants in text (e.g., Cooper et al. 2007) as well as in-class lecture and discussion. The setting for each session was determined by the preference of the caregiver of the child being assessed. Locations included a university office, the child's school, a youth room in a church, and a conference room at the office where the participants worked. Commercially available materials included the VB-MAPP assessment guide and protocol (Sundberg 2008), the reinforcer assessment for individuals with serve disabilities (RAISD; Fisher et al. 1996), and various toys and assessment materials used during the assessment. Additional materials developed by the experimenter for the purposes of this study included a VB-MAPP checklist, pre-assessment interview, administration handbook, and instructional PowerPoint® presentation (available upon request from the first author). The pre-assessment interview was designed to be conducted with caregivers to determine at which level of the VB-MAPP it is most appropriate to begin a child's assessment, and to determine the best type of assessment environment for that child. Questions designed to identify the initial assessment level were questions about the child's use of verbal operants.

Ouestions designed to determine the best type of assessment environment were questions about the conditions under which the child would most likely comply with instructions and interact with the assessment administrator. verbal operant assessed in the VB-MAPP and lists of potential ways to probe those skills using materials commonly found in classrooms (e.g., books and inset puzzles). The instructional PowerPoint® presentation was developed based on the information in the administration handbook and was used as an aid during instruction. The VB-MAPP checklist was used to measure the participant's responses during levels 1 and 2 assessments (see Appendix). Sample guestions from the pre-assessment interview Category Ouestion Environmenta Will your child sit at a table to work? If so, how long will he or she generally work? Environmenta Will your child sit at a table to work? If so, how long will he or she generally work? Environmenta Will your child sit at a table to work? If so, how long will he or she generally work? Environmenta Will your child sit at a table to work? If so, how long will he or she generally work? Environmenta Will your child sit at a table to work? If so, how long will he or she generally work? Environmenta Will your child sit at a table to work? should be avoided during the assessment?Levelb Does your child label actions, like clapping, sleeping, eating, or jumping?LevelCan your child sort pictures according to categories like putting all animals together and all clothes together?A multiple-probe design across participants was used to evaluate the effects of training in implementation of levels 1 and 2 of the milestones assessment. Instruction was implemented with Lucy once the results showed stable responding for both participants during pretest probes. Once Lucy's posttest results were visually judged to be stable, and Ethel's pretest results were also judged to be stable and low, instruction was implemented with Ethel. The dependent measure was the percentage of points earned on the implementation checklist for level 1 consisted of a total of 29 responses were measured during level 2 assessments. The responses on each checklist were selected by a team of clinicians who observed VB-MAPP assessments and identified administrator behaviors that appeared to result in successful assessments. completed all of the probes necessary to evaluate the child's skills. For each response on the checklist, participants could earn 0, 1, or 2 points with a higher point value indicating better performance. Specific criteria for each point value indicating better performance. "never," "for a portion of the session," and "throughout the session," a "never" was scored if the participant was not observed to engage in the response at any point during the first half of the session or the second half of the session. "Throughout the session" was scored if the participant engaged in the response during both halves of the session. If a response was not applicable, that item on the calculation of the percentage of points earned. For example, in order for a participant to perform the response specified in item 12 on the checklist, the child who the participant was assessing would have had to avoid a task that was presented in a naturalistic format during the assessment, the item could not be scored; therefore, the observer crossed that item out and did not count it toward the participant's percentage of points earned. Interobserver agreement (IOA) data were collected for 80 % of all pretest probes and 50 % of all pretest and multiplying by 100. Mean pretest and posttest IOA for Lucy and Ethel was 82.5 (range 78-89.7 %) and 85.9 % (range 78-89.7 %) and 85.9 % (range 78-93.1 %), respectively. Pretest Probes Before BST was implemented, participants also had access to toys and assessment. materials purchased by the district for which they worked; no other materials were provided to the participants. Access to these materials were provided in an effort to simulate the sort of minimal training conditions to which professionals implementing new assessments are often exposed. Seven to 10 days after receiving the VB-MAPP protocol and guide, both participants began pretest probes. A level 1, test probe consisted of the participant implementing an entire level 2 VB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of the participant implementing an entire level 1 vB-MAPP milestones assessment and a level 2 test probe consisted of test prob placement) were collected as the focus was on the behavior and skills of the test administrators; however, anecdotally, we can report that the children who were assessed varied in skill level, diagnosis, and verbal ability. Participants assessed different children throughout the study and never assessed the same child more than twice. The only instructions provided to the participants during test probes were to complete the assessment and to notify the experimenter when they were finished. The experimenter when they are finished of five components as follows: instruction, modeling, rehearsal and feedback, and remedial teaching as needed. Instruction Instructions were delivered in a small group format with 1-3 additional clinicians who were not serving as participants in the present study. During instruction, the first author gave a presentation using PowerPoint® slides (available from the first author upon request). The slides were shown on a large screen and each participant was given a printed copy of the slides and the administration handbook. The presentation began with general information about the VB-MAPP and its uses. Next, descriptions and examples were provided of each operant assessed in the milestones assessment. For example, a slide was presented on the mand that provided a definition of manding and examples of evoking mands by either contriving establishing operations. Similar slides were presented for each operant. The final portion of the PowerPoint® included general assessment techniques. This section included items such as interspersing probes for different operants throughout the assessment, providing a rich environment by attending to the child, providing a and using materials for multiple sub-skill assessments. Each behavior on the VB-MAPP checklist was covered in the instructions portion of the intervention package. Participants were able to ask questions throughout the instructional session and were encouraged to do so.

Instructions lasted between 90 and 120 min depending on the number of additional people attending the session. Modeling Video models of the experimenter and other experienced clinicians implementing the VB-MAPP were shown immediately after the instruction component of training was completed. The video models consisted of different clips from levels 1 and 2 milestones assessments modeling all of the behaviors on the VB-MAPP checklist use do assess the participants' performance (see Appendix). For example, one video clip illustrated following the child's lead, creating a rich environment, interspersing tasks, and maximizing the use of materials (e.g., using books to probe multiple operants). Text was embedded in the video clips to orient began. Participants were also shown an organized assessment intervention, the rehearsal and feedback components of the intervention, the rehearsal and feedback components of the experimenter role play, the experimenter to each role play, the experimenter to each role play, the experimenter provided performance specific feedback. For example, in one role, play participants were also told that they should select their own materials from an array of available stimuli. For example, in one role, play participants were correct and would earn full points on the checklist. After each role-play, the experimenter provided performance-specific feedback. Feedback included telling the participant which responses were correct and would earn full points on the checklist. The experimenter role plays were the same for both participants. Posttest probes for both participants experimenter reviewed each step no the checklist that was not scored full points and provided a description of how they could have completed the step. During feedback, participants were also parised for 3-5 steps on the checklist that earned full points. Researce for both pericipants were also parised for 3-5 steps on the checklist that earned full p

Pretest probes for both participants indicated that they did not implement either level of the milestones assessment at the criterion of 90 % of points earned prior to BST. Lucy's pretest performance was 64 and 51.9 % of points earned for levels 1 and 2, respectively. Ethel's mean points earned on pretest probes for level 1 of the assessment was 58.4 % (range 40.4-70 %), and for level 2 her mean performance was 55.3 % (range 42.8-72 %). Following BST, Lucy's performance post-training was a mean of 94.5 (range 90-97.9 %) and 88.25 % (range 78.6-98.1 %) for levels 1 and 2, respectively. Ethel's performance also improved following all postest probes that the participants assessment during pretest and posttest probes. Remedial training sessions were conducted following all posttest probes that the participants scored less than 90 % correct on The results of the study indicate that BST may be an effective method for teaching school psychologists to implement levels 1 and 2 of the VB-MAPP milestones assessment. As shown in Fig. 1, performance for both participants increased immediately after the small group BST. That is, while additional feedback was needed for participants to reach the mastery criterion of 90 % or better, the initial training session did result in improved performance. These results are important when considering the possibility of implementing similar training methods in other districts and settings where time and resources for staff training are minimal. Future research should further examine the effects of BST with groups of increased size.

It would also be wise to evaluate whether the assessment techniques learned for levels 1 and 2 (e.g., organizing materials, establishing one's self as a reinforcer) generalize to the level 3 milestones assessment. The maintenance of such skills over time should also be evaluated. As shown in Fig. 1, Ethel's pretest score deteriorated over time. This decreasing trend may have been a function of time between the pretest probes and her exposure to the VB-MAPP guidebook. In a conversation with the experimenter, she indicated that she carefully read the guidebook proto to her initial pretest performance would have improved upon further review of the guidebook. The expessment administration. The initial pretest performance shows that both Ethel and Lucy were earning full points for the responses on the checklist that may be identified as "general assessment, and provided breaks for play (or play-based assessment). These assessment skills may be similar to those used with the other tests that the participants completed the RAISD, established rapport with the assessment, contriving motivating operations, and provided breaks for play (or play-based assessment, and provided breaks for play (or play-based assessment, solit) and the other tests that the participants regularly administrational materials. These assessment administrational materials. These results ang general assessment for level 1 of the operants throughout the assessment, contriving motivating operations, and provided breaks for play (or play-based assessment, contriving motivating operations). These assessment and provided breaks for play (or glay-based assessment, contriving motivating operations). These assessment and provided breaks for play (or glay-based assessment, contriving motivating operations) and the vB-MAPP, such as probing each of the operants throughout the assessment and provided breaks for play (or glay-based assessment, contriving motivating operations) and the repeater of the vB-MAPP, such as probing each of the operants throughout the a

Similarly, because BST and the remedial instruction were implemented as a treatment package, it is unclear if all of the components are necessary for the desired behavior change. Future research should examine the effects of BST with and without remedial instruction on administration of the VB-MAPP to determine which instructional components should be included in VB-MAPP workshops and training. The initial BST package (instructions, modeling, rehearsal with a confederate, and feedback) was completed in less than 3 h per participant. However, the remedial instruction was much more time consuming, as this component required ongoing observation and communication between the individual conducting the training and the individual learning to implement the assessment. It will also be important to evaluate whether the results of the VB-MAPP assessment is being administered in an effective way that generates useful learner results.Participants in this study were preparing to become Board Certified Behavior Analysts. It is unclear how their coursework and field experience required to be eligible for certification may have affected their performance, as both participants were familiar with the terminology used in the VB-MAPP (e.g., mand, tact, intraverbal) and basic behavior change procedures (e.g., reinforcement, extinction). While the VB-MAPP guide suggests that individuals who conduct the assessment have a "basic understanding of behavior analysis, Skinner's (1957) analysis of verbal behavior, and linguistic structure" (Sundberg 2008, p. 16), additional research should be conducted with participants

who may be likely to use the assessment, but who have less experience behavior analysis and the verbal operants (e.g., social workers, special education teachers, early intervention provide a further understanding of the prerequisite skills necessary to implement such an assessment. Finally, future research should employ a more rigorous experimental design. The current study used a multiple-probe design across two participants, increasing the number of pretest probes for the first participant (Lucy in the current study), and adding follow-up probes. Despite the limitations to the experimental design used in the present study, the results are promising and convincing. Specifically, the immediate and robust effects shown for both participants during posttest probes provide evidence that the intervention was effective in establishing the skills necessary to complete levels 1 and 2 of the VB-MAPP milestones assessment. We thank Tracey Tufenk for her assistance in data collection. We thank Leigh Grannan for her contribution in the development of the pre-assessment interview. All author-developed materials are available by contacting the first author. Cooper JO, Heron TE, Heward WL. Applied behavior analysis. 2. Upper Saddle River, N.J.: Pearson Prentice Hall; 2007. [Google Scholar]Fisher WW, Piazza CC, Bowman LG, Amari A. Integrating caregiver report with a systematic choice assessment to enhance reinforcer identification. American Journal on Mental Retardation. 1996;101:15–25. [PubMed] [Google Scholar]Gilliam JE.

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