July 7, 2022

Reviewed SEBH Screening Tools: Preschool-Kindergarten

Introduction

Universal social-emotional-behavioral health (SEBH) screening is a foundational component of a multi-tiered system of supports (MTSS). It provides a means for early identification of those children who may be at-risk of developing SEBH concerns and may benefit from early intervention. It can also help school systems determine how all children are responding to universal practices.

The purpose of this document is to provide schools information on universal SEBH screening measures that meet the Iowa Department of Education's (Department) established criteria for universal SEBH screening measures for preschool and kindergarten age students. The review is not an exhaustive review and is limited to measures submitted by vendors. Other screening measures, not reviewed by the Department, may be as/more effective for universal SEBH screening.

This resource is provided as a tool to support schools in selecting SEBH screening measures. Schools are not required to use or select from this reviewed list. When engaging in universal screening, schools should follow appropriate parent approval processes as outlined by their district policy.

Reviewed Measures

Each of the below measures was reviewed for use with children in Grades preschool-kindergarten. The list is based on measures submitted by vendors using a review process coordinated by the Iowa Department of Education. Reviewed measures will be updated on a regular basis. Please see associated Appendices for review details. Reviewed measures are organized into the following categories:

- M: Meets. The measure meets all Minimal Criteria and Preferred Criteria.

- M^R: Meets with Reservations. The measure meets all Minimal Criteria however does not meet all Preferred Criteria. Please see associated Appendices to review the strengths and weaknesses of each measure.

- X: Did not meet minimal criteria for universal SEBH screening.

Grade	Preschool	K	Comments
BIMAS-2 Standard		X	Reviewed but did not meet criteria. See Appendix A.
DESSA-full		X	Reviewed but did not meet criteria. See Appendix B.
DESSA-mini		M^R	Meets criteria with reservations. See Appendix C.
SAEBRS		M	Meets criteria. See Appendix D.
PEDS	X	X	Reviewed for Ages 3-6. Did not meet criteria. See Appendix E.
PEDS: DM	X	X	Reviewed for Ages Birth-6. Did not meet criteria. See Appendix F.

The Review Process

The review process was intended to identify SEBH screening measures/tools that meet the minimum research-based criteria necessary to accurately identify factors that place children at higher risk for behavioral health conditions, to determine appropriate treatment or intervention, and to identify the need for referral for appropriate services.

The Review Team

A team of 8 reviewers with the following combined knowledge and skill-set was selected from the Iowa Department of Education to review each submitted measure:

- Prior experience facilitating or being a reviewer on a universal screening measures review team.
- Knowledge of SEBH conditions including clinical and mental health conditions.
- Knowledge of social-emotional competencies.
- Experience using and interpreting universal screening measures.
- Knowledge and experience with assessment across Ages preschool-kindergarten.
- Knowledge of statistics necessary for reliable and valid universal screening measures.

At least 6 reviewers reviewed each criteria for each measure and meeting criteria required 75% agreement across 100% of the review criteria.

Minimal Criteria

SEBH screening provides a means for identification of children who may be at-risk of behavioral health conditions or may be in need of referral to intervention or SEBH support. For this, the measure needs to efficiently and accurately identify children who are likely to be below expectations on either future measures or more robust measures of SEBH, while minimizing incorrect identifications.

The following minimal criteria used to review each measure.

Criteria	Description
Purpose	The measure must be able to be used with children Ages preschool-kindergarten to identify children at-risk of behavioral health conditions, who may need intervention, referral for diagnostic assessment or referral for mental health services/supports. The measure needs to be fully developed and could measure behavioral health need by identifying children with internalizing or externalizing concerns, screening for a specific condition or identifying children who are at risk due to lagging social-emotional or adaptive skill (i.e., communication, social skills, activities of daily living) development.
Risk Levels/ Classifications	The measure is required to have well-established classification categories. Including such things as: low risk vs. some risk vs. high risk; not at risk vs. at-risk vs. clinically significant; on-track vs. in need of intervention etc.
Reliability	The measure is required to have reliability (i.e., consistency or stability). The higher the reliability, the more confidently one can interpret an obtained score being due to children's characteristics rather than session-to-session variability. Measures are required to have a minimum of two forms of reliability with reliability estimates equal or greater than .70.

Criteria	Description
Classification Accuracy	**Classification accuracy is the most important for a screener, indicating the reliability with which a measure differentiates between truly at-risk and not at-risk.** Area Under the Curve (ROC analysis) is a statistic used to indicate this quality, with a 1.0 indicating perfect prediction and 0.5 indicating essentially random prediction. For universal screening, Area Under the Curve and related Specificity/Sensitivity statistics needed to be provided by the vendor and at least meet a minimum standard of 0.7 for Area Under the Curve, with higher values preferred.
Content Validity	Measures have sound theory, framework and/or research for the SEBH constructs assessed. Evidence is required that the assessment has content alignment to SEBH constructs and peer reviewed research.

Preferred Criteria

The following criteria contribute to the strength of a universal SEBH screener. Where measures missed one or more of these criteria, the measure was marked as "Met with Reservations". It is recommended that prior to selecting a measure, schools review the norming information in comparison to their local demographics. Additionally, if a school intends to use one of the selected measures to identify levels of SEBH beyond screening (at-risk vs not at-risk) they should make sure the measure has strong validity across the range of scores represented within the assessment.

Criteria	Description
Norming Year	Norms are statistics that describe the performance of an attribute in a specific group or population. Because a population and their typical attributes can change over time it is important for norms to be relatively recent (within the last 15 years).
Norm Group	A description of the composition of the norm group is helpful as it aids schools in interpreting to what extent scores on the measure are meaningful for their children. When there are more similarities between the norm group and children assessed we have more confidence in the assessment. Ideally, we look for measures to be normed with a nationally representative sample or a sample drawn from the Midwest. It's also helpful to see if the measure performs similarly for children of various demographic groups (e.g., sex, race, ethnicity, socio-economic status, language etc.).
Bias/Fairness for Groups	The extent to which attention was given to the degree to which the measure accurately identifies SEBH risk for various groups of children. A statement of any cautions for schools interpreting this measure.
Criterion Validity	Criterion validity refers to how well a tool measures the skills or attributes it intends to measure. The higher the validity with well-established measures, the more confidently one can believe a child's performance on the measure accurately represents specific behavioral health symptoms and/or social-emotional behavioral development. Criterion validity is a correlation of the measure with other established measures and adequate criterion validity is considered no less than .60. While criterion validity is preferred, it was not required, as a screening measure is not intended to measure the full range of a behavioral health construct but to distinguish between at-risk and not at-risk and a more accurate measure of risk is Area Under the Curve.

Additional Optional Information

Vendors were also able to provide a range of optional information that might be helpful to schools as they select and use SEBH screening measures. This information, as provided by vendors, is included for measures that meet criteria in order to support school use.

Criteria	Description
Alignment to CASEL's SEL Competencies	Iowa's Social-Emotional Learning Competencies are based on the Collaborative for Academic, Social, and Emotional Learning's (CASEL) social-emotional learning framework. Vendors indicated if their tool specifically measured skills aligned to CASEL's social-emotional learning framework.
Type of Measure	Vendors indicated the tool's approach to assessment: ● <u>Problem/deficit-based</u>: assesses emotional and behavioral problems or symptoms of concern. Children who have higher/more concerns are more at-risk. ● <u>Strengths-based</u>: assesses social-emotional and behavioral strengths. Children who have many/more strengths are less at risk. Those with fewer strengths are less equipped which put them at risk and potentially in need of instruction even if they aren't displaying social-emotional concerns. ● <u>Dual-factor</u>: assesses both presence/absence of emotional and behavioral problems and social-emotional and behavioral strengths/skills/assets. Free of psychopathology and flourishing with emotional, psychological and social well-being suggests children are not at-risk.
Administration Time	The amount of time it takes to administer and score the measure and whether the measure is scored individually or may be scored in groups.
Administration Qualification	The minimum qualifications necessary to administer, score, and interpret the screening instrument. Qualification level if appropriate for the measure.
Electronic Availability & Summary Report	The electronic features of the assessment including: ● Electronic administration and scoring ● Electronic child summary reports ● Electronic class/school summary reports
Language/s	The language/s available for the screening instrument.
Cost per Child	The average cost per child per use including associated costs (e.g., materials, licenses, online scoring, etc.).
Acceptability to Stakeholders	A statement from the vendor drawn from research regarding the acceptability of the measure to administrators, teachers, parents and/or children.

Appendices

Appendix A: BIMAS-2 Standard

Overview

Western Psychological Services (WPS) [Behavior Intervention Monitoring Assessment System-2 (BIMAS-2)](#) was reviewed and did not meet minimum criteria as an SEBH screener for Grades preschool-kindergarten. While the measure did not meet criteria for use in this context the measure may be appropriate to use by schools for other purposes.

Grade	Preschool	K	Comments
BIMAS-2 Standard		X	Reviewed but did not meet criteria.

Review Results

The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	The BIMAS-2 is a measure for kindergarten through twelfth grade universal screenings to identify children at-risk for common concerns or low adaptive skill. The BIMAS-2 is a brief and repeatable measure designed to be used for screening, progress monitoring, outcome assessment, and program evaluation within the RTI framework. The BIMAS-2 Standard, which was reviewed as part of this process, includes parent and teacher screening measures for kindergarten age students. WPS also offers the BIMAS-2 Flex which is a progress monitoring measure.
Required Criteria	*Criteria Met:* The BIMAS-2 identifies children Ages 5-18 as "high risk", "some risk" and "low risk" for behavior concerns (conduct, negative affect) and adaptive skills (cognitive/attention, social/communication, academic functioning). The BIMAS-2 was developed through a series of studies with expert feedback and feedback from public schools and community mental health centers. All forms submitted for this review (teacher and parent) have good internal (.75-.90) and test-retest (.79-.96) reliability. The teacher and parent forms have good sensitivity and specificity (.78-.86). *Criteria Not Met:* The BIMAS-2 teacher and parent forms do not meet criteria for classification accuracy as they do not report Area Under the Curve, a required criteria for universal screening measures.

Appendix B: DESSA-full

Overview

Aperture Education's Devereux Student Strengths Assessment - full (DESSA-full) was reviewed and did not meet minimum criteria as an SEBH screener for Grades preschool-kindergarten. While the measure did not meet criteria for use in this context the measure may be appropriate to use by schools for other purposes.

Grade	Preschool	K	Comments
DESSA-full		X	Reviewed but did not meet criteria.

Review Results

The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	The DESSA-full helps educators understand the overall strengths of a child and identify those children who have lower social-emotional learning skills and require additional support. The measure is typically used in practice as a gate 2 assessment for children who receive DESSA-mini scores in the "need for instruction" range.
Required Criteria	*Criteria Met:* The DESSA measures overall social and emotional competence of children Grades K-8 and identifies child social-emotional competence as "strength", "typical", or "need for instruction". The measure meets criteria for reliability and criterion validity.
	Criteria Not Met: The DESSA does not meet criteria for classification accuracy (sensitivity, specificity, Area Under the Curve), required criteria for valid universal screening measures.

Appendix C: DESSA-mini

Overview

Aperture Education's Devereux Student Strengths Assessment-mini (DESSA-mini) meets criteria with reservations as an SEBH screener for kindergarten.

Grade	Preschool	K	Comments
DESSA-mini		M^R	Meets criteria with reservations.

Review Results

The DESSA-mini met all minimal criteria and most of the preferred criteria. The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	The DESSA-mini is a brief teacher/childcare provider administered social-emotional screener for Grades K-8. It helps educators understand the overall strengths of a child and identify those children who have lower social-emotional learning skills and require additional support.
Required Criteria	The DESSA-mini identifies child social-emotional learning skills as "strength", "typical", or "need for instruction". The DESSA-mini is rooted in resilience and social-emotional learning theories and is a promotion and prevention tool to assess and promote the social-emotional skills children need to succeed in school and life. The measure has good internal (.91-92) and test-retest (.88-.94) reliability. The measure favors specificity (.98) over sensitivity (.62) which means it results in more false negatives than false positives. While this is the case, it is fairly accurate (.79) at classifying children social-emotional learning needs and meets overall expectations for classification accuracy (.70).
Preferred, but Not Required Criteria	*Criteria Met:* The DESSA-mini was originally validated with nationally representative populations including Midwest sampling and has good (.80-.92) positive validity correlations with established measures of strength and adaptive skills and good (-.70-72) negative validity correlations with measures of school problems and behavioral symptoms. The vendor indicated the DESSA-mini was developed with attention to accuracy in identifying risk across grades, gender, race/ethnicity and provides the following cautions regarding interpreting results for specific subgroups: *"The standardization sample for the K-8 DESSA instruments were constructed to represent the population of children on important demographic characteristics including gender, age/grade, region of residence, race, Latinx ethnicity, and socio-economic status as indicated by eligibility for free or reduced-price lunch. Despite representativeness nationally, there may be subgroups of children located in geographic regions of the US that were not adequately included in this sample. In these instances, caution should be given in interpreting results only for qualitative purposes to understand a given child's relative social and emotional strengths and needs rather than being used to make important educational decisions such as referral for additional targeted services."* *Criteria Not Met:* The DESSA-mini was normed in 2005-2006, which puts it just outside the preferred 15-year window for norming.

Additional Optional Information

Criteria	Description
Alignment to CASEL's SEL Competencies	As a universal screener, the DESSA-mini measures overall social and emotional competence.
Type of Measure	Strength-based instrument that measures the overall social and emotional competence of children.
Administration Time	1 minute per child; a teacher can rate an entire class of children in one planning period.
Administration Qualification	**Qualifications for Raters of the DESSA-mini** The DESSA-mini is completed by the child's teachers, after-school program staff, or other professionals who interact directly with the child on a regular basis. There is one main qualification of a rater: The rater must have had sufficient exposure to the child over the four weeks preceding the completion of the DESSA-mini. Because the scores are a function of the number of times specific behaviors have been noted, a rater's insufficient opportunity to observe the child could yield an erroneously low rating. **Qualifications for Users of the DESSA-mini** Because the DESSA-mini results can be used to identify children who are at risk for, or experiencing, early signs of emotional or behavioral concerns, to monitor progress over time, and to evaluate outcomes for children, DESSA-mini users should receive training in the proper administration, interpretation, and utilization of the DESSA-mini. This should include knowledge of the interpretation of standardized scores such as T-scores and percentiles, how to monitor progress over time, and how to communicate the results to parents and family members or other professionals. Typically, DESSA-mini users will include administrators, school and community counselors, teachers, mental health consultants, program directors and evaluators, prevention specialists, school psychologists, social workers, and researchers.
Electronic Availability & Summary Report	Administration? Yes Scoring? Yes Child Summary? Yes Class Summary? Yes School Summary? Yes
Language/s	English and Spanish; Aperture Education will be happy to consider developing other translations and cultural adaptations.
Cost per Child	12 Month Subscription ● $3.15-$4.50 per child unlimited use of the DESSA and DESSA-mini ● Technical Assistance 20% of annual license based on cost per child.

Criteria	Description
Acceptability to Stakeholders	The DESSA measures have been used in over 3,000 schools to better understand the social and emotional strengths of over 1 million children. Members of district and school communities, including administrators, teachers, parents, and children report valuing the strength-based nature of the DESSA items to measure positive child behaviors related to success in school, college, careers, and life. The DESSA measures have been lauded for their psychometric excellence as well as their practicality in administration, scoring, and reporting made possible by the online Aperture System.

Appendix D: SAEBRS

Overview

Illuminate Education's [Social, Academic, and Emotional Behavior Risk Screener (SAEBRS)](#) meets criteria as an SEBH screener for kindergarten.

Grade	Preschool	K	Comments
SAEBRS		M	Meets criteria.

Review Results

The SAEBRS met all minimal and preferred criteria for children in Grades kindergarten-5. The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	SAEBRS is a teacher administered assessment of children' general, social, academic, and emotional behaviors. Data can also be useful in program evaluation and in determining how children may be best supported at Tier 1. For instance, the data can be used to indicate whether a school should invest in the support of teacher classroom management practices, given the prevalence of social behavioral concerns, or in the instruction of academic enabling skills given the noted extent of academic behavioral difficulties.
Required Criteria	The SAEBRS identifies children as "not-at-risk" and "at-risk" for general social, academic and emotional behaviors (domains). The measure was developed through expert feedback as well as research on early indicators of future difficulties. The measure has good sensitivity (.88-.94) and specificity (.75-.94) for Kindergarten for both domains and total scores. It is quite accurate (AUC .88-.98) at classifying children in Kindergarten as not-at-risk and at-risk and is accurate at classifying children by domain and total score.
Preferred, but Not Required Criteria	*Criteria Met:* The SAEBRS was normed in 2021. Norms were derived from a nationally representative sample. The measure has moderate to high validity correlations with established measures. The vendor indicated the SAEBRS was developed with attention to accuracy in identifying risk across a variety of subgroups including grade, gender, race/ethnicity, geographic region, free and reduced lunch, community size, language and did not provide any specific cautions in interpreting the SAEBRS results. Criteria Not Met: None

Additional Optional Information

Criteria	Description
Alignment to CASEL's SEL Competencies	SAEBRS is broken down into three domains (social behavior, emotional behavior, academic behavior) that are interrelated with the CASEL framework's five core competencies. SAEBRS measures the child behavioral manifestations of these competencies.
Type of Measure	SAEBRS is a dual-factor assessment measuring both child social-emotional behavioral strengths and problems/deficits.

Criteria	Description
Administration Time	4 minute per child; teacher completes the computer-based form.
Administration Qualification	FastBridge is supported by an extensive set of materials to support teachers and children, including self-directed online training courses that allow teachers to become certified to administer each of the FastBridge assessments. General or special education classroom teachers serve as the most appropriate SAEBRS informants. Teachers chosen to complete the SAEBRS should have interacted extensively with each target child during the month immediately preceding SAEBRS completion. Ideally, they have known the child for at least six weeks. A teacher may complete the SAEBRS following an approximately 30-minute training session available via online training modules. Ongoing technical support is available on the website, along with training manuals and materials.
Electronic Availability & Summary Report	Administration? Yes Scoring? Yes Child Summary? Yes Class Summary? Yes School Summary? Yes
Language/s	NA
Cost per Child	12 Month Annual Subscription ● FastBridge SEB (Social Emotional Behavior): $3.00 per child ● FastBridge (standard; Behavior and Academic): $8.00 per child ● Upgrade to Iowa AEA contract (Grades K-6 SAEBRS/mySAEBRS and Math): $2.35 per child ● Discounted subscription on behalf of Iowa AEA contract (Grades 7-8 SAEBRS/mySAEBRS, Reading and Math): $5.88 per child ● Discounted subscription on behalf of Iowa AEA contract (Grades 9-12 SAEBRS/mySAEBRS, Reading and Math): $6.30 per child
Acceptability to Stakeholders	SAEBRS and mySAEBRS items were carefully constructed to assess Social, Emotional, and Academic behaviors and attitudes that are objective and observable and common to all children. These assessments went through many rounds of review, field-testing, and study and have been empirically validated to identify children at risk of academic, social, or emotional problems and who may need additional support. SAEBRS was independently reviewed by the National Center on Intensive Intervention (NCII). Results of that review, which strongly support the validity of SAEBRS, can be found at this link: https://charts.intensiveintervention.org/bscreening

Appendix E: PEDS

Overview

The Parents' Evaluation of Developmental Status (PEDS) was reviewed and did not meet minimum criteria as an SEBH screener for Grades preschool-kindergarten. While the measure did not meet criteria for use in this context the measure may be appropriate to use by schools for other purposes.

Grade	Preschool	K	Comments
PEDS	X	X	Reviewed for Ages 3-6. Did not meet criteria.

Review Results

The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	The PEDS® identifies children who need early identification and referrals, those that need brief intervention but not referral and facilitates collaboration with families, enabling teachers and psychologists to better explain results to families when administered in advance of school, parent/teacher conferences.
Required Criteria	*Criteria Met:* The PEDS is a developmental measure of social/emotional/mental health, behavior, fine motor, gross motor, expressive language, receptive language, self-help, cognitive, school skills, psychosocial risk. It is completed by teachers/parents/childcare providers and identifies child development as "high-risk", "moderate-risk", "low developmental risk but elevated risk for SEBH", "low-risk". The measure meets criteria for reliability and criterion validity *Criteria Not Met:* The PEDS does not fully meet criteria for classification accuracy. The measure has adequate sensitivity (.74-.98) and specificity (.70-.86) however does not report Area Under the Curve, required criteria for valid universal screening measures.

Appendix F: PEDS:DM

Overview

The Parents' Evaluation of Developmental Status: Developmental Milestones (PEDS:DM) was reviewed and did not meet minimum criteria as an SEBH screener for Grades preschool-kindergarten. While the measure did not meet criteria for use in this context the measure may be appropriate to use by schools for other purposes.

Grade	Preschool	K	Comments
PEDS:DM	X	X	Reviewed for Ages Birth-6. Did not meet criteria.

Review Results

The below provides a summary of the purpose and strengths and weaknesses of the measure.

Criteria	Description
Purpose of the Measure	The PEDS:DM® consists of 6-8 items per age/encounter and is designed to replace informal milestones checklists (which are notorious for their inability to detect children with problems) with highly accurate items known to predict developmental status in all domains. Each item on the PEDS:DM® taps a different developmental domain (fine motor, gross motor, expressive language, receptive language, self-help, social-emotional, and for older children, reading and math). Failure on an item predicts difficulties in that domain, with cutoffs tied to the 16th percentile and below: The point at which children struggle when in school, are likely to be retained in grade, drop-out of high school, etc. Source: Pg. 1, PEDS:DM® Professionals' Manual

Criteria	Description
Required Criteria	*Criteria Met:* The PEDS:DM is a brief developmental measure of fine motor (written language or graphomotor at older ages), receptive language, expressive language, cognitive/academic (including pre-reading/reading, pre-math/math, written language at older ages), gross motor, self-help, and social-emotional skills and includes supplemental measures of psychosocial risk/resilience, autism-specific screening, and several screens for older children including safety words and Literacy Screener (SWILS), and the Vanderbilt ADHD scale). It provides information on children's status, facilitates skilled monitoring of development, replaces informal milestones checklists with an accurate one that has clear cutoffs for problematic versus typical development. It also clarifies parental concerns. It is intended to: • Support state and federal policy on early detection; • Provide an accurate measure of milestones with definitive scoring criteria, i.e., replace informal checklists; • Ensure that other aspects of screening/surveillance are included in PEDS:DM® longitudinal reporting forms, i.e., PEDS® with its longitudinal view of parents' concerns and how to address them with evidence; • Indicate when other surveillance measures are needed (e.g., assessment of psychosocial risk and resilience factors); • Offer clear guidance to providers on how best to respond to results of screening/surveillance measures. It is completed by teachers/parents/childcare providers and provides developmental information including: "adverse findings", "non-adverse findings" and "met" and "unmet" milestones. The measure meets criteria as a measure that includes assessments for behavioral health risk. It meets criteria for reliability and criterion validity. *Criteria Not Met:* PEDS:DM does not fully meet criteria for classification accuracy. The measure has adequate sensitivity (.82-.83) and specificity (.84) however does not report Area Under the Curve, required criteria for valid universal screening measures.