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Aligning State Developmental Standards to Toddler and Early Childhood Montessori Practical Life and Sensorial Materials

Erin H. Conway

St. Catherine University, ehconway@stkate.edu

Amanda E. Fink

St. Catherine University, aefink@stkate.edu

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Aligning State Developmental Standards to Toddler and Early Childhood

Montessori Practical Life and Sensorial Materials

An Action Research Report

By Amanda Fink and Erin Conway

Aligning State Developmental Standards to Toddler and Early Childhood

Montessori Practical Life and Sensorial Materials

Submitted on May 4, 2015

in fulfillment of final requirements for the MAED degree

Amanda Fink and Erin Conway

Saint Catherine University

St. Paul, Minnesota

Advisor: Sandra Wyner Andrew

Date: May 4, 2015

A handwritten signature in black ink, appearing to read "Sandra Wyner Andrew". The signature is written in a cursive style with a large initial "S".

Abstract

The purpose of this research was to determine whether a progress report that aligns the Montessori materials to child development benchmarks would increase parent understanding of the Montessori materials, as well as give teachers a means of reporting growth that is systematic and consistent. Trial reports were created aligning the toddler and early childhood practical life and sensorial curriculum areas to the state standards. Parents were asked to compare the current reports with the new reports. The post-implementation survey results suggested that 97% of parents better understood the alignment between the Montessori materials and child development and 100% of teachers affirmed the new reports made a clear association between the two. The new reports clarified the alignment between the Montessori materials and children's development for parents and created a standard measurement tool for Montessori educators with the vernacular to explain the Montessori materials progression to parents.

The Montessori method of education is over a hundred years old. It has become well established and is respected by many. Despite the longevity, it remains misunderstood by many in the general population. Two of the most common Montessori programs are the Early Childhood level (ages three – six years) and the Toddler level (ages 18 months – three years). Of those parents who choose the Early Childhood and Toddler Montessori programs for their young children, many find the pedagogy hard to understand.

The method uses many manipulatives, and there is little paperwork or evidence that can be sent home with the child at the end of the day. In addition to this lack of verification, the Montessori pedagogy does not use a standard form of measurement to track a child's progress. Montessori teachers are taught to use observation to evaluate the children's progress and document based on their observations. These observations are individually interpreted and can, therefore, be inconsistent. The lack of a standard of measurement is a shortcoming of the Montessori programs and part of what contributes to the misunderstanding of the philosophy.

The conductors of this research asked: Would having a standard measurement of developmental progress in the Montessori Toddler and Early Childhood levels help teachers consistently evaluate the children's progress and help the parents to understand the progression of a Montessori education?

Research has shown (Dore, 2014; Vandergrift, 2003) that parents of children in the Montessori Early Childhood and Toddler programs want to understand the relevance of the Montessori materials and activities but struggle to understand the importance of some of the classroom activities. Dore (2014) and Vandergrift (2003) depict parents'

general confusion about the Montessori method and highlight activities that, to someone who is not familiar with Montessori, seem to be mundane and even irrelevant to child development and learning. Nevertheless, despite their confusion, parents continue to register their children in Montessori schools. Even without paper evidence, they see developmental and cognitive results in their children, and therefore they continue to have confidence in what seems to be a mysterious pedagogy.

Damore, (2004a), Dunn, (2000), and Turner (2000) argue that it is time for Montessori to develop a standard of measurement. The vital first step in the development of a Montessori educational accountability system is articulation of learner outcomes. Creating this type of standard is an unprecedented opportunity for Montessori schools to be perceived as publicly accountable with the power to direct content that reflects developmentally appropriate teaching and learning (Damore, 2004b). Schools need authentic assessments in both cognitive and social/emotional development (Damore, 2004a) that are presented in a systematic and credible manner (Turner, 2000). Dunn (2000) suggests that Montessorians must be able to verbalize and document, in a language universally understood by educators, the program strengths and how it is unique.

There is some concern that rubrics or scoring guides that define learning expectations and criteria for mastery of those expectations may compromise the values of Montessori by eliminating self-direction. However, the use of a systematic scoring guide for student work “brings the look of ‘standardization’ to our assessments without sacrificing our principles of teaching. They help communicate clear learning outcomes and results to parents, students and others outside of Montessori” (Turner, 2000, p. 32).

The Montessori materials are designed to foster a broad span of development, using all of the senses. Each material fosters several parts of development, which can be aligned to various State Standards. There is a need for a standardized measurement that clearly articulates children's developmental skills and knowledge, based on the States' Standards, and aligned with the Montessori materials and activities.

In an attempt to offer both parents and teachers an assessment tool that aligns the Montessori materials and activities to developmental standards, we developed a progress report for the *Practical Life* and *Sensorial* subject areas of the Early Childhood and Toddler Montessori classrooms. We chose to concentrate on these areas in the Montessori curriculum because the developmental value of many of their activities and materials are not easily apparent to parents and non-Montessori trained individuals.

According to the American Montessori Society (AMS) Practical life activities are:

Designed to help young children in Montessori classrooms learn to take care of themselves and their environment through activities such as hand washing, dusting, and mopping. These activities help toddlers and preschool-age children learn to work independently, develop concentration, and prepare for later work with reading and math; older children participate in more advanced activities. (n.d., para.18)

AMS defines Sensorial exercises as:

Activities that develop and refine the five senses—seeing, hearing, touching, tasting, and smelling and build a foundation for speech, writing, and math through the use of sensorial materials. The exercises also bring

order to the barrage of sensorial impressions the child experiences from birth onward. (n.d., para. 22)

The purpose of the creation and presentation of the progress reports in this action research is twofold:

1. to educate the parents on the developmental aim behind each Practical Life and Sensorial work in a Montessori classroom and the state developmental standards that are met through the work, as well as the skill progression toward independence or mastery;
2. to offer Montessori teachers a tool to use to track the progress of all students clearly and consistently.

The present study took place in two separate Montessori schools and encompassed, in total, four Early Childhood classrooms and two Toddler classrooms. The feedback forms were presented to all families involved in these classrooms as well as to all certified American Montessori Society teachers. The intent of this action research study is to offer the Early Childhood and Toddler Montessori community a progress report that clearly connects the Montessori materials and activities with child development based on state standards in order to provide parental education and teacher evaluation consistency.

Review of Literature

In reviewing the literature, the need for quality assessments, both formative and summative, is not solely a Montessori community need. As the topic of universal preschool and increased funding for preschool, in general, has entered our society so has the need for accountability measures. Any measure of assessment should be “built on a

foundation of age-appropriate standards, child development research, and developmentally appropriate content and methods” (Riley-Ayers, 2014, pg. 11). A high-quality assessment analyzes many different domains within the early childhood classroom. According to Riley-Ayers (2014), the five domains most often assessed are:

- 1) physical well-being and motor development
- 2) social and emotional development
- 3) approaches to learning
- 4) language and literacy
- 5) cognitive skills, including early mathematics and early science knowledge.

These five domains are agreed upon throughout the literature (National Research Council, 2008). They provide a set of general developmental expectations for what Toddler and Early Childhood students should know and be able to do, at the various ages of development from 18 months – Kindergarten. Having a concrete framework of standards for early learning and development, promotes continuity for children across early opportunities, and promotes consistency in selecting and measuring the child outcomes (Washington State Office of Superintendent of Public Instruction, 2008). Creating an in-depth aligned progress report for the Montessori classroom will increase the teachers’ awareness of the need to observe skill acquisition along the developmental continuum and thus assess and evaluate according to the five domains used in mainstream education.

The literature confirms that early learning guidelines have been created for 56 states and territories in the United States (U.S. Department of Health and Human Services, 2014) the purpose of which is to provide teachers with support to address

children's personal and social development (Logue, 2007) as well academic progress.

The standards will help to “galvanize internal improvements with early care and education institutions” (Feldman, 2010, p. 233). Nevertheless, some of the most skilled and experienced early childhood professionals have had limited opportunities for professional development and training in selecting and using assessments and analyzing data about children's progress (National Research Council, 2008).

Researchers agree that practitioners should understand why they are measuring a child's performance before choosing an assessment instrument. A discrepancy often exists between the purpose of the assessment tool and how it is used (Losardo and Notari-Syverson, 2001). “When assessment is for ...accountability or to influence the curriculum, the assessment tool should be aligned with the curriculum as set forth in standards documents representing intended goals of instruction.” (Meisels, S. J., DiPrima-Bickel, D., Nicholson, J., Xue, Y., Atkins-Burnett, S., 2001). In Montessori classrooms, the “Three Period Lesson” is used to assess a child's knowledge. However, often the teacher measures the child's ability to do the activity rather than the developmental skill that the activity fosters. A progress report that aligns the materials with the developmental skills would help to steer the focus onto the child's developmental skill rather than mastery of the activity (Turner, 2000).

Curriculum-based assessment (CBA) and curriculum-based measurement (CBM) are commonly used authentic assessments. CBM can provide data to identify at-risk children, intervention effectiveness and a method of accountability, but it is too general and does not identify specific skills a child needs to develop in order to make progress. CBA, on the other hand, can provide a continuous formative assessment of specific skills

needed to reach a desired outcome. Downs and Strand (2006) found that a combination of CBM and CBA is an effective assessment technique. If curriculum-based or curriculum-embedded assessment tools are to be used to measure progress toward certain standards, the instrument must assess behaviors linked to those standards (Grisham-Brown, Hallam and Brookshire, 2006, p. 46). Through the practice of observation Montessori teachers record the behaviors, but do not always link them to the standards.

There are many types of curriculum-based assessment tools that are already aligned with developmental standards. The Work Sampling System (WSS), High/Scope Child Observation Record, Creative Curriculum are used often and can support the teacher's efforts (Grisham-Brown, Hallam and Brookshire, 2006). The literature shows that aligned curriculum-based assessment helps educate parents on reasonable goals for their children and allows them to see the connection between preschool and K-12 classrooms (Logue, 2007, p. 43). Since CBA allows for the aligning of developmental standards to activities and is easier for parents to understand and assess their children's goals, it may be an appropriate type of assessment to be created and used in the Montessori Early Childhood and Toddler environments.

A Montessori authentic assessment of academic, cognitive and social/emotional development (Damore, 2004a) that correlates to a set of standards in a systematic and credible manner will serve as a first step to the Montessori community becoming publicly accountable. In order to help take this next step, we researched the effectiveness of creating a standard progress report for the Early Childhood and Toddler environments that:

- 1) Aligns child developmental benchmarks with the Montessori materials and activities
- 2) Increases parent understanding of their child's activities in the Montessori classroom and how they foster developmental skills.

Methodology

The first part of this project was to gain a perspective on the parents' view and understanding of the progress report used at their respective schools. In order to gather this information, currently enrolled parents were emailed an anonymous inquiry form with the current progress report attached or embedded (see Appendices A-C). The objective was to find out what parents found beneficial about the reports, what was confusing or lacking and what they would like to gain from a progress report. The parents were also asked if they understood the link between child development and the Montessori materials and if they would, or do, find it useful for the report to connect the two. The goal was to use this information to create a better way to record and report on a child's growth and progress.

A template of a trial progress report was created for each level. The initial intent was to educate the parents of the alignment of the Montessori materials to the State Child Development standards (State of NJ DOE, 2013; PA Dept. of Education, 2009), with a second objective of offering the teachers a consistent evaluation tool through the recording of a child's progress along a continuum towards skill acquisition, connected to activities and materials being used. The Scope and Sequence of the Montessori method created by Montessori Compass (Montessori Compass, 2014) and the developmental aims listed in the researchers' Montessori training albums (Conway, 1994; Fink, 2004)

were used to align the Montessori materials to State Child Development standards. With that information, a rubric was created for works in the Sensorial and Practical Life areas of both the Toddler and Early Childhood Montessori classrooms (see Appendices D and E).

After the progress reports had been created, the teachers were presented with the consent form to participate in the survey as well as a prototype of the newly established progress report. Twelve certified AMS teachers, with experience ranging from two years to 30 years, were asked to use the report. In the Early Childhood classroom, the children range in age from three years through the kindergarten year and stay with the same teacher for all three years. The Early Childhood teachers were asked to complete a total of three reports; one with a child in the first- year, one in the second-year, and one in the third-year of the program. The children in the Toddler classroom range in age from 18 months – three years old. These students typically stay with the same teacher for two years. The Toddler teachers were asked to complete two reports; one representative of a first- year toddler and the other of a second-year toddler.

Six Early Childhood teachers, five from a suburban Montessori school in New Jersey and one from a Pennsylvania suburban Montessori school completed a total of 30 Early Childhood Reports. Five Toddler teachers from four different suburban Montessori schools; two in New Jersey and two in Pennsylvania completed a total of ten reports.

Once the trial reports were completed, the teachers were given an online anonymous feedback form to complete (see Appendix F). This form asked teachers to rate the usefulness of the trial report compared to the current report used at their

respective school. They were also asked to report on the length of time it took to complete the form and the benefits and detriments of the format.

The teachers were then asked to participate in an informal discussion session after the surveys were completed to voice any other concerns, comments or questions about the report. This session was recorded and used to as data to assess the effectiveness of the trial report.

The parents were emailed a copy of the trial report and were sent a second inquiry form (see Appendix G). This time the purpose was to assess parents' opinions of the trial report's ability to convey information about the Montessori method and its link to child development. After the research was complete, the researchers presented their finding to the teachers and administrators at their respective schools.

Analysis of Data

Early Childhood Results

The first data analyzed for Early Childhood was from the surveys about the report that is currently being used at the school. Parents were asked to state what parts of the progress report they viewed as beneficial and helpful, as well as how strongly they felt it explained the link between child development and the Montessori materials (see Figure 1).

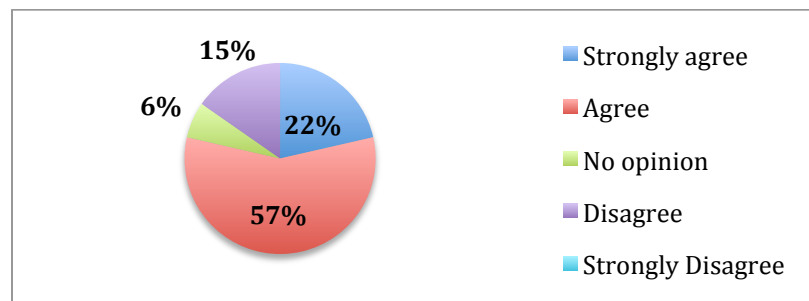


Figure 1. Percentage of Early Childhood parents and their level of agreement that the current progress report helps them to understand the alignment between the Montessori materials and child development.

Seventy-nine percent of the parents conveyed that the current Early Childhood progress report was helpful in understanding their child's strengths and weakness for the academic and social skills listed. "It allows me to see [the development of] my child's strengths and weaknesses, including motor development, ability to work independently, [and] areas of interests, as well as social development" was a comment written by one respondent. Seventy-nine percent of parents also stated that they found the current report to be helpful in understanding the link between the Montessori materials and child development. One-third found the amount of detail appropriate and helpful.

When asked what could be changed to make the progress report better, 20% of parents reported they wanted to see a report that aligned their child's progress to their peers or to the state standards for the child's age. In an open-ended response area, twenty percent also wanted to have the progress report handed out at least twice a year. Parents stated multiple reporting periods would enable them to see their child's progression throughout the year. Almost 15% of parents wanted a more detailed rating or grading system that could help them understand the development of their child.

Interestingly, as it relates to the purpose of this study, nearly 25% of parents wanted to understand more fully the Montessori curriculum and how academic and social skills are gained using the materials. One parent wrote, "evaluation [should be] aligned to more specific skills - ex. fine motor, gross motor, sensory and linking these to the classroom work that develops these skills.... ex. rolling up a rug develops what skills, bead work & pouring develops what skills..., etc."

On the second survey, parents were asked to view a report template that linked state standards on child development skills to the Montessori materials used. One hundred percent of the respondents agreed with three points:

1. This report was better than the original format in explaining the link between Montessori materials/activities and developmental benchmarks.
2. They felt more knowledgeable about the link between the Montessori materials/activities.
3. They more fully understood and placed greater value on the work accomplished in the Practical Life and Sensorial areas of the Early Childhood Montessori classroom.

One parent stated:

Before seeing this new type of Progress Report, I was happy with our current reports. I felt I had a good understanding of the insight and reasoning behind the classroom activities, but this report gave a very clear picture into a child's world and progress in the classroom. I also think this would be a great tool to include in promoting the Montessori philosophy to increase enrollment. I would put this on the website and [Facebook] page to provide insight into the Montessori method not only to current families but potential new families and students.

This parent had written during the first survey, “We chose a Montessori school because of the approach to learning so we may have a better understanding and not need as much information than those who chose [school name removed], in particular, for reasons other than the educational approach.” By implementing the goals of the materials as well as

connecting the State Standards with the Montessori materials, the new progress report apparently offered a new level of developmental information for this parent.

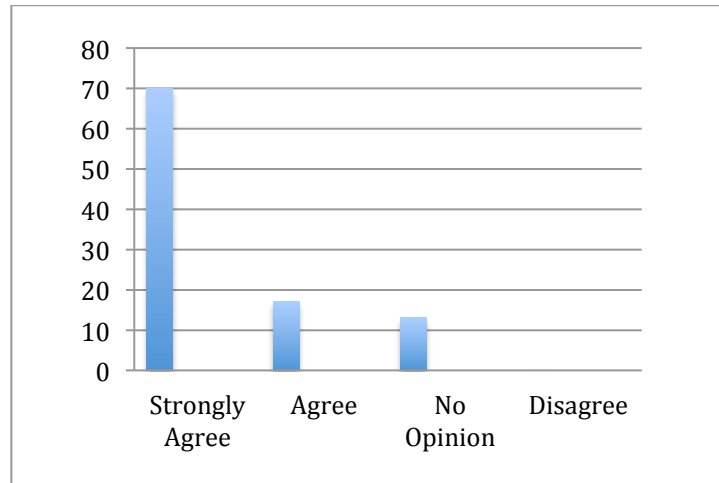


Figure 2. Percentage of parents that believe the new progress report increases the value they place on work in the Montessori Early Childhood environment.

On the other side of the argument, when asked what was confusing about the new report, an Early Childhood parent stated: (see Appendix E).

Interesting that you are suggesting that the report may be confusing. I found it less confusing, more overwhelming. This report is a truly fabulous piece of work.

Detailed and thoughtful. However with a heavy heart I have to say I don't believe it will be widely read nor fully appreciated. Parents really just want the specifics relating to their child. Some context is great but mostly "how's my kid doing". I can see such a report having greater benefit when potential performance issues have been identified. It might also be helpful to provide this input at back to school night referencing so that they will see this again at report time. But by and large I think the richness of this form will go largely unappreciated. Sorry to be such a voice of negativity.

With this viewpoint likely to be heard again, it may be advisable to make certain that the information is accessible to parents throughout the year. As suggested by the parents, the information could be listed on the website for reference during the school year and a version tailored to the child's level could be given to the parents at conference time. This approach may need to be adjusted depending on the feedback of the parents from the individual schools.

Toddler Results

The data from the parents who responded to the Toddler survey was collected and analyzed in three parts: parental surveys, teacher surveys, and teacher informal discussions. The first section analyzed was the parents' perspective of the current progress report. The Toddler parents were asked about their general understanding of the alignment of Montessori materials to child development, and 81% said that they believe that they understood the alignment between the Montessori Materials and child development standards.

When asked if they felt that the current Toddler progress report helps them to understand the alignment between the Montessori materials and child development standards, 88% answered of respondents agreed that it did (see Figure 2).

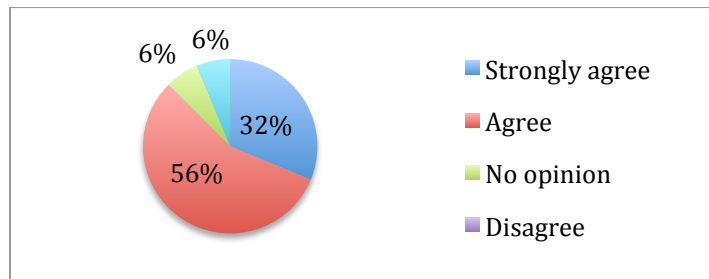


Figure 3. Percentage who said the current progress report fosters an understanding between child development and Montessori materials

Despite the fact that 81% of the respondents believed that they understood the link between child development and the Montessori materials, 94% of the respondents said that they would find it helpful for the report to directly align the Montessori materials and activities to child development standards. When asked what was most helpful about the current Toddler Progress Report, more than three-quarters answered that the most helpful part of the Toddler Report was that it allowed them to track their child's development easily.

When the parents were asked what they felt could be changed to improve the current Toddler progress report, 44% stated that they would not change the report. A quarter of the respondents said that they would like the report to reflect better how they could support their child's development at home. Nineteen percent of the respondents took this opportunity to reiterate, in an optional comment box, that they would like to see the classroom activities aligned to child development in the Toddler Report.

A second survey was sent out to the same group of parents. This time it was sent out with the newly developed prototype Toddler Progress Report that directly aligned two of the five areas in the Toddler Montessori classroom (Practical Life and Sensorial) to the State Child Development Standards. The parents were now asked for their perspective on the new report. When the parents were asked if this progress report clearly explained the link between the Montessori Materials and activities and State Child Development Standards, 100% of the respondents said that it did (70% strongly agreed, and 30% agreed it did).

Of that group, 90% of respondents said that this report helped them understand better how the Montessori materials foster child development standards. The same group

said that the report helped them to more fully understand the purpose of the Practical Life and Sensorial Montessori Materials and that they now placed a greater value on the work accomplished in the Montessori environment than previously. Seventy percent of the respondents said that they felt the new report was a better format than the report that they had previously evaluated, 20% had no opinion and 10% disagreed that the new format was better. The 20% who responded that they have no opinion of the new report format, had also responded that they better understood the purpose of the materials and they placed more value on the materials because of their new understanding of the alignment. This brings into question, why if parents better understood the purpose of the materials and placed a higher values on the activities in classroom, 30% of respondents either had no opinion or disagreed that the prototype report was a better tool than the current one. One speculation may be taken from an optional comment made by a parent who did prefer the prototype report to the original one. The respondent said:

I wish I had the previous format in front of me. I feel like there may be some behaviors and other developmental benchmarks lost on the new sheet. However burdensome it may be for the teacher, I, as a parent, desire comprehensive reporting on my child's development.

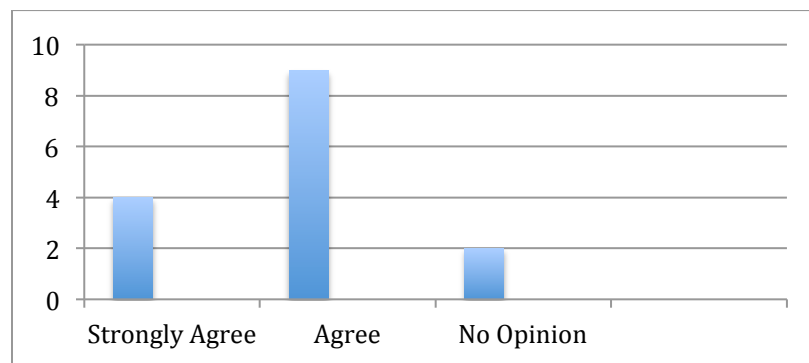


Figure 4. Percentage of Toddler parents that place greater value on the work accomplished within the Montessori environment after using the new alignment tool

Given this statement as well as the two other respondents who stated that they had no opinion as to which format was better, perhaps the researcher should have made it clearer that this new report was a partial report, as it encompassed only two sections of the classroom environment (Practical Life and Sensorial) and an actual report would include all of the areas of the classroom as well as social/emotional development.

Teacher Results

The teacher responses about the report were as positive as the parents. Data collected from the teacher feedback forms and the informal discussion sessions showed that 100% of teachers, ranging in experience from two to 30 years, said that they believed that the progress report would help parents better understand the purpose of the Montessori materials and activities. One hundred percent of the teachers also agreed that they would use the progress report during conference time either as a guide for them or to share with parents.

In this project, the less experienced teachers expressed an appreciation of the clear alignment and wording as well as the well-defined levels of progression. These guidelines for observation and terminology may be of value for less experienced teachers. One teacher stated in the open-ended response section of the survey:

I think, especially for new teachers and teachers in training, the report describing the different evaluation criteria for Practical life is very beneficial. I sometimes think new teachers and even seasoned teachers miss the importance of this area and how much it creates the foundation for all future learning in the classroom.

Seeing it may help them stop and rethink how quickly they push children towards ‘paper and pencil’ activities.

Discussion

It is interesting to note that approximately 75% of parents from both groups, to varying degrees, thought that the original format explained the developmental purposes of the Montessori activities/materials. However, when presented with this information in a different format, 100% of parents agreed that the new format did, in fact, help them to fully value and understand the Montessori method. This percentage correlates with the teachers’ speculation that the new report would help parents better understand the purpose of the Montessori materials and activities.

On analysis of the data, the comments written by parents suggest that while parents may be confident in their basic knowledge of their child’s schooling, their understanding of the depth of the Montessori method is limited. Their responses suggest that the aim of educating parents in a more comprehensive manner about the purpose of the Montessori materials and activities and how they foster child development, by implementing a more detailed progress report, has been met. In order for parents to fully appreciate the significance of the early childhood years as well as to appreciate their investment in their child’s education, it is imperative that they understand, at a comprehensive level, how the Montessori materials foster child development.

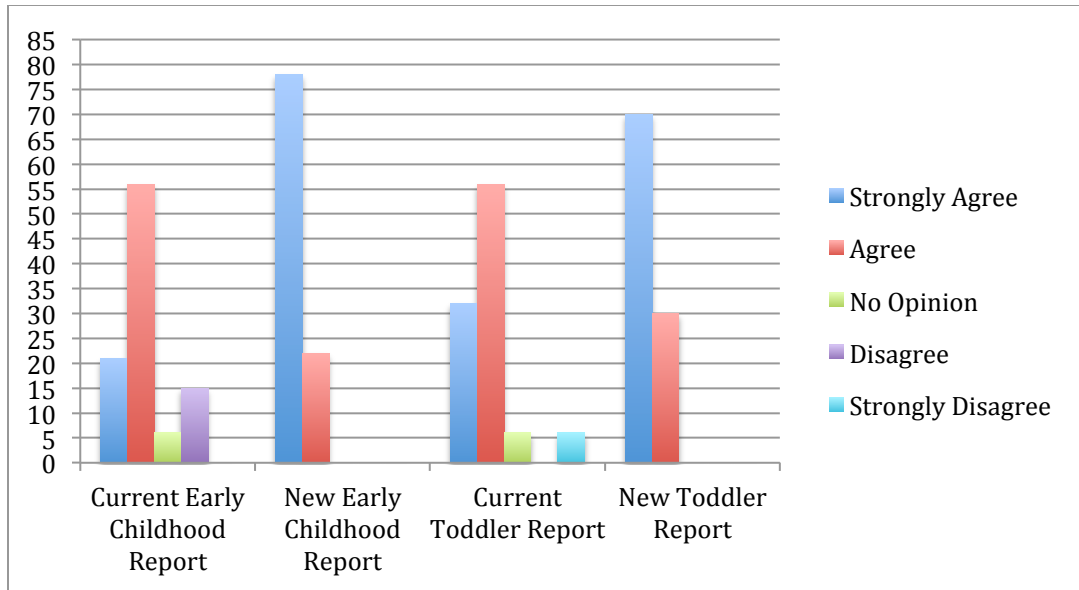


Figure 4. Comparison of parents that believe the new progress report better explains the alignment between State Developmental Standards and the Montessori Practical Life and Sensorial materials than the previous template used.

Action Plan

The goal of this Action Research was to bridge the gap between the Montessori materials and State Developmental Standards for both parents and teachers. Eighty-three percent of all respondents believed that they understood the link between the Montessori materials and child development before implementation of the new report. The results of the survey on the new report show that 97% said that they better understood the link, and 83% placed a greater value on the Montessori materials due to their increased understanding of the link. One parent responded, "I was completely satisfied with the previous format, but this new format is fantastic. It makes it real and tangible to understand how to help my child". This comment as well as the one stated earlier in Early Childhood results confirmed the hypothesis that there was an erroneous understanding of the purpose of the Montessori materials on the part of parents. Providing a clear alignment of the State Standards to the Montessori Practical Life and Sensorial materials

proved to be enlightening. As shown in the literature review, traditionally, Montessori progress reports encompass the recording of a child's progress based on observations. As Turner (2000) explains:

This may take the form of anecdotal reporting or a checklist stating whether a child has been introduced to a material, working on a material, or has mastered it, without stating what the learning objective of that material is or where the child is on the developmental continuum of that skill acquisition.

These types of progress reports can be cumbersome to complete, are inconsistent and do not give parents a clear understanding of the child's developmental progress. Information on the purpose of the activities and materials in the Montessori classroom that corresponds to developmental skill acquisition should resolve parents' misunderstandings and misconceptions. Turner (2000) believed that this could be achieved with the implementation of an aligned record-keeping system based on authentic measure of assessment. This project has begun a path in achieving a formative authentic type of assessment.

It is the objective of the researchers that this progress report format will:

1. Offer both parents and teachers a clear alignment of the developmental value of the Montessori materials and the language to explain both.
2. Offer a consistent tool for reporting growth for the Montessori community that offers a systematic and credible manner to measure student's progress.

Moreover, the larger goal is to bring consistent and transparent accountability to Montessori education in the hope that the Montessori method will receive the respect it deserves within the education field.

3. Offer teachers guidelines as to developmental benchmarks addressed with the Montessori activities and materials, thus improving their ability to assess a child's progress and meet their student's educational needs. This can improve their practice and their ability to communicate with parents.
4. Organize the progression of the Montessori activities and materials in a way that parents can understand the incremental growth their child exhibits. According to the Children's Aid Society (2003) and Edutopia (2000), parental involvement is widely believed to be critical to children's early academic development (Arnold et al. 2008 p.75) therefore the ability for parents to understand their children's development is significant.

Furthermore, this project will allow teachers and parents to use the same language created in the report to discuss how the children are performing in class currently and how they will continue to grow. Ultimately, it will help teachers to communicate better with parents about the Montessori philosophy and method.

In future research, this report should be expanded to include all of the areas of the classroom. Parents and teachers in the current study wanted to know what the report would look like, particularly in the language and math areas. Further research could include whether parents place greater value on the geography, science and cultural areas of the classroom using this template, since the developmental and educational outcome of these areas may be less ambiguous. The researchers want to expand the sample size and population to include more parents and teachers as well as to diversify their demographics. The study could be expanded to collect information on how Montessori parents around the country view the reporting systems at their schools. Then, when given

a tool such as the ones created for this project, researchers could gather feedback on whether parents are of the opinion that a more detailed report would be helpful and informative.

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Appendix A: Current Early Childhood Progress Report

SKILL LEVEL: S = Seldom, U = Usually, A = Almost Always

SOCIAL AND EMOTIONAL DEVELOPMENT

Grace and Courtesy/Personal Development	
Shares and works well with others	A
Shows respect for the rights and property of others	A
Shows compassion	A
Utilizes conflict resolution skills	A
Interrupts appropriately	A
Communicates needs to others positively	A
Interacts appropriately with adults	A
Shows respect for the classroom	A
Follows the rules of the classroom	A
Responsible for his/her belongings	A
Manages frustration	A
Demonstrates self-control	A

Work Habits/Learning Style	
Chooses a variety of work from all areas of the classroom	A
Chooses work easily	A
Chooses work appropriate to ability	A
Organizes work space and materials	A
Uses materials properly	A
Concentrates for appropriate periods of time	A
Able to work independently	A
Shows initiative and self-motivation	A
Works well with others	A
Shows interest in group presentations	A
Has interest in trying new work	A
Spends time observing others in an appropriate manner	A
Is attentive and responsive to adult instruction	A
Asks for help when necessary	A

SKILL LEVEL: I = Introduced, P = Progressing, WD = Well Developed, N/A = Not Yet Applicable

CURRICULUM

Practical Life	
Exhibits control of tools requiring fine motor skills	P
Exhibits focus on activity	WD
Follows complete sequence of an activity	P
Cares for him/her self	WD
Cares for the classroom environment	WD

Sensorial	
Can order objects by size	WD
Can match objects	WD
Knows 10 colors by name	WD
Identifies familiar objects by touch	WD
Can place geometric shapes in proper inset	WD
Identifies simple geometric shapes	WD
Identifies advanced geometric shapes	P

Art	
Uses different art media with interest	WD
Holds scissors correctly and cuts	P
Creates work to his/her own satisfaction	WD

SKILL LEVEL: S = Seldom, U = Usually, A = Almost Always

SPECIALS

Movement	
Participates in games and activities	A
Can perform age appropriate gross motor skills	A

Music	
Sings with enthusiasm	A
Shows appreciation for songs and instruments	A

Spanish	
Participates in lessons and activities	U
Retains vocabulary	U

COMMENTS

J. is a curious, independent, and kind young lady. She loves to learn! J. has enjoyed many new lessons this year, in particular the maps and the geometric solids. She has begun word building and is quickly moving through the California Series. In math, she has begun counting and recording the short chains. She has made many new friends with whom she often likes to work and play. J. seeks out new lessons when she is interested in the subject. She is working on her fine motor control of tools, such as a pencil or scissors, though with time and practice this continues to improve. J. has been a joy to teach and she will be missed.

Communication and Language Skills

Listens attentively in a group	WD
Has vocabulary adequate for his/her needs	WD
Speaks clearly and confidently	WD
Expresses his/her ideas effectively	WD
Can phrase questions clearly	WD
Can auditorally discriminate between initial sounds	WD
Recognizes consonant sounds and symbols	P
Recognizes vowel sounds and symbols	P
Decodes phonetic words with short vowels	P
Knows phonograms	NA
Reads simple phrases	NA
Works with story-writing activities	NA
Holds pencil correctly	P
Can write letters with a model	P
Can write letters without a model	NA
Can write his/her own name	P
Can properly place pencil on line/page	P
Left to right letter placement	P

Math

Demonstrates knowledge of quantities 1-10	WD
Demonstrates knowledge of symbols 1-10	WD
Associates quantity and symbol 1-10	WD
Recognizes the value of zero	WD
Recognizes teen numbers	P
Demonstrates knowledge of numbers to 100	I
Understands decade transitions	P
Uses decimal system materials (golden beads)	NA
Understands place value	NA
Uses the exchange materials (10 units=1 ten bar, e.g.)	NA
Uses skip counting materials (bead chains)	NA
Writes numbers with model	P
Writes numbers without model	NA
Performs addition with concrete materials	NA
Performs multiplication with concrete materials	NA
Performs subtraction with concrete materials	NA

Cultural (Geog, Science, Zoo, Botany, Bio, History)

Can identify land/water/air	WD
Can manipulate puzzle maps	WD
Can identify continents	P
Makes his/her own maps	P
Distinguishes living/non-living	WD
Distinguishes plant/animal	WD

Appendix B: Current Toddler Progress Report

School Year:	Toddler Developmental Form 18-36 months
Child's Name:	Teacher:
Birth Date:	Schedule:

Skill Level Key	
Well Developed	W
Developing	D
Beginning to Develop	B
Improvement Needed	I
Not Applicable	N/A

Days Absent/Tardy	
Fall	/
Spring	/

Social/Emotional Development	Fall	Spring
Uses "I", "Mine", "Me", "You"		
Shows empathy		
Plays in Parallel		
Beginning to enjoy playing with other children		
Growing in confidence and independence		
Understands "mine" "yours"		
Seeks assistance when needed		
Beginning to help others		
Cooperates in small & large group activities		
Makes eye contact when communicating		

Approaches to Learning/Learning Style	Fall	Spring
Makes independent choices		
Explores the classroom using all senses		
Shows persistence		
Developing concentration skills		
Seeks/ accepts help from others		
Demonstrates willingness to try new experiences		
Follows classroom rules & routines		
Participates in group activities		
Completes a full cycle of an activity		
Developing problem solving skills		

Independent /coordination Skills	Fall	Spring
Undresses self: removes clothing, shoes, etc.		
Dresses self: pants, jacket, shirt, pajamas		
Puts on own shoes and socks		
Walks steadily without bumping into objects		
Alternates feet going up and downstairs		
Jumps in place		
Throws and catches a ball		
Pedals a tricycle		

Sensorial Development	Fall	Spring
Visually matches objects & pictures		
Recognizes and matches colors		
Developing an awareness of seriation by size		
Sorts objects by one attribute		
Recognizes basic shapes		
Names circle, triangle, square		
Recognizes textures		
Notices colors & shapes in the world around them		

Eats with utensils		
Drinks from a cup without a lid		
Uses toilet independently		
Uses a tripod grasp		

Identifies loud/soft, big/little, heavy/light		
Names red, blue, yellow, purple, green, orange		

Language	Fall	Spring
Developing vocabulary to express needs		
Comprehends simple directions (touch your toes)		
Responds to questions		
Speaks in 3-5 word sentences		
Speech is understandable but has errors		
Understands up, down, behind, under		
Names parts of body		
Names common animals		
Uses "Hello", "Please", "Thank you", "Goodbye"		
Uses plurals		
Follows multi step directions		
Names pictures		
Knows first and last name		
Knows gender		
Knows age		
Can identify own written name		
Sequences 2-3 pictures		
Enjoys being read to		
Has favorite stories		

Manipulative & Math	Fall	Spring
Counts objects to 3		
Counts objects to 7		
Counts objects to 10		
Associates quantity with symbol 1-3		
Recognizes numbers 1-2		
Recognizes numbers 1-5		
Understands the concept more and less		
Able to string beads		
Performs posting activities		
Performs nesting activities		
Dexterity in using a latch board		
Developing eye/hand coordination		
Completes a 5 piece interlocking puzzle		
Draws horizontal & vertical lines		
Draws a circle		
Holds scissors		
Able to use glue to create a collage		

Special Area Classes	Fall	Spring
Participates in weekly Music Class		
Participates in weekly Art Class		

Fall Strengths & Goals

Spring Strengths & Goals

Appendix C: Parent Survey on Current Progress Reports

Completion of this survey is voluntary. By completing this survey, you are giving your consent to participate in this study. Completing this survey is completely voluntary and you may quit at any time. Completion of these questions is confidential and no identifiable information is collected. *Required.

I would like my responses to be included in the study. *

- Yes, I would like my responses to be included in the study.
- No, I would prefer that my responses were not included in the study.

If you would like to include your responses in the study, please enter the first three letters of your mother's maiden name plus the date of the month of your birth. For example, RHO24

For anonymous tracking purposes only

1. The current progress report at your child's school helps you to understand the alignment between the Montessori materials and child development.

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

2. In what ways do you find the progress report at your child's school helpful, please explain. *

3. In what ways could the current progress report be changed to make it more helpful? *

4. Do you understand the alignment between your child doing activities, such as table washing, in a Montessori classroom and child development?

- Yes
- No

5. Would/Do you find it helpful for the progress report to align activities, such as table washing & other Montessori activities, to child development?

- Yes
- No

6. What else, if anything, would you like the researcher to know about this project?

Practical Life: Care of Self						
Purpose:	Materials/Activities	Beginning	Progressing	Advancing	Independent	Leads to:
Child learns how to be respectful of others by learning to blow nose using a tissue and wash hands with soap and water. Child learns how to care for self by dressing appropriately according to weather/situation.	Dressing frames, child's own clothing	Child will wash hands, blow nose, put on clothing appropriate to weather with teacher	Child will wash hands, blow nose, put on clothing appropriate to weather with teacher	Child will wash hands, blow nose, put on clothing appropriate to weather with minimal reminders. Manages	Child will wash hands, blow nose, put on clothing independently	Independent care of self: dressing and undressing self, caring for hygiene
		2.7: Children develop self-help and personal hygiene skills	Child will wash hands, blow nose, put on clothing.	Child will wash hands, blow nose, put on clothing.	Child will wash hands, blow nose, put on clothing.	Child will wash hands, blow nose, put on clothing.
State Standards:						
2.7: Children develop self-help and personal hygiene skills						
Notes:						

Practical Life: Peace Education/ Grace and Courtesy						
Purpose:	Materials/Activities	Beginning	Progressing	Advancing	Independent	Leads to:
Child uses effective listening and speaking skills to communicate own emotions and to understand those of others. Done through role modeling, practice and discussion. Part of many Grace and Courtesy lessons.	Peace rose or other object	With teacher guidance, child repeats teacher modeled words to solve conflict or express needs, recognizes emotions, may use calming techniques	With teacher guidance, child uses words to solve conflict or express needs, recognizes emotions, may use calming techniques	Child uses words to solve conflict or express needs to child's satisfaction with minimal teacher intervention, typically manages emotions with calming techniques	Child uses words to solve conflict or express needs independently, typically manages emotions with calming techniques	Leads to peaceful resolution of conflict in a variety of settings. Allows child to positively deal with full range of emotions with respect and success.
		0.1: Children demonstrate self-confidence	Child uses words to solve conflict or express needs, recognizes emotions, may use calming techniques	Child uses words to solve conflict or express needs to child's satisfaction with minimal teacher intervention, typically manages emotions with calming techniques	Child uses words to solve conflict or express needs independently, typically manages emotions with calming techniques	Leads to peaceful resolution of conflict in a variety of settings. Allows child to positively deal with full range of emotions with respect and success.
State Standards:						
0.1: Children demonstrate self-confidence						
0.3: Children identify and express feelings						
0.4: Children exhibit positive interactions with other children and adults						
9.3: Children identify and solve problems						
Notes:						

Practical Life: Walking on the line						
Purpose:	Materials/Activities	Beginning	Progressing	Advancing	Independent	Leads to:
Children walk on a taped or painted line on the floor. Child ultimately walks heel to heel with hands at her sides or carrying an object, head erect and with perfect balance	May carry object such as balls or water and must carry it without tripping nose or spilling water.	Child works to remain on the line. Frequent loss of balance. Watches feet to maintain course. Arms may be outstretched.	Child works to remain on the line. Occasional loss of balance. May watch feet to maintain course. Arms may be outstretched.	Child works to remain on the line. Frequent loss of balance. Head should be upright. May not be able to carry an object, looking down the line while maintaining perfect balance. Able to hold object. Able to focus on completion of task.	Child can move gracefully down the line while carrying an object, looking perfect balance. Able to focus on completion of task.	Aids in establishing control of body movements as will with perfect equilibrium, balance and coordination.
		2.4: Children develop competence and confidence in activities that require gross motor skills	Child works to remain on the line. Frequent loss of balance. Watches feet to maintain course. Arms may be outstretched.	Child works to remain on the line. Occasional loss of balance. May watch feet to maintain course. Arms may be outstretched.	Child works to remain on the line. Frequent loss of balance. Head should be upright. May not be able to carry an object, looking down the line while maintaining perfect balance. Able to hold object. Able to focus on completion of task.	Child can move gracefully down the line while carrying an object, looking perfect balance. Able to focus on completion of task.
State Standards:						
2.4: Children develop competence and confidence in activities that require gross motor skills						
2.4.3: Use objects and props to develop spatial and coordination skills						
Notes:						

Montessori Developmental Progress Report: Early Childhood Sensorial

Details		Term Result	
Student name	Jane Doe	Term starts	Fall 2015
Age	4;1	Term ends	Spring 2016
Year	Second	Tardy	4
Teacher name	Ms. Smith	Absent	3

Sensorial: Visual Discrimination (Size and Dimension)		Materials/Activities	Beginning	Progressing	Advancing	Independent	Leads to:	Level
Purpose:		The purpose of these materials is to develop perceptions of differences in dimension; develop attention in working with sequences and systematic operations; encourage power of reasoning; set groundwork for the understanding science of numbers; and develop comparative and superlative vocabulary; development of motor control	Child can grade material from largest to smallest with teacher assistance. May not recognize errors in grading. Will need teacher assistance to take out and put away material correctly.	Child can grade material from largest to smallest with teacher assistance. Should recognize errors in grading. Will need teacher assistance to take out and put away material correctly. May use extension or variation.	Child can grade material from largest to smallest independently. Self-corrects errors in grading. Takes out and puts away material correctly with minimal teacher reminders. Uses extensions and variations.	Child can grade material from largest to smallest independently. Self-corrects errors in grading. Independently takes out and puts away material correctly. Uses extensions and variations. Can give lessons to other students.	Preparation for other areas of sensorial curriculum; preparation for mathematics; science and writing	Fall: Spring:
State Standards:		2.4.2 Develop and refine fine-motor skills (e.g., complete gradually more complex puzzles and use smaller-sized manipulatives during play) 9.1 Children demonstrate initiative, engagement, and persistence. 9.2 Children show creativity and imagination. Math 4.1: Children begin to demonstrate an understanding of number and counting. Math 4.3: Children begin to conceptualize measurable attributes of objects and how to measure them. Math 4.4: Children develop spatial and geometric sense.						Notes:

Sensorial: Visual Discrimination (Color and Form)		Materials/Activities	Beginning	Progressing	Advancing	Independent	Leads to:	Level
Purpose:		The purpose of these materials is to develop perceptions of color gradients; geometric shapes (2D and 3D) and complex geometric concepts. Promotes ability to make systematic distinctions and development of related vocabulary. Deductive reasoning skills and visual memory abilities are strengthened.	Can match Color Box and may be able to identify colors. Can build the monomial cube.	All of previous plus: Can recognize and match colors of color box 2. Recognizes basic shapes.	All of previous plus: Can build binomial cube and may be able to build trinomial cube. Can form shapes using constructive triangle boxes.	All of previous plus: Recognizes all geometric solids. Can build trinomial cube. Can grade color box 3. Recognizes variations in shapes in geometric cabinet.	Helpful for geometric study in future years and development of artistic skills	Fall: Spring:
State Standards:		LPK5a: Begin to sort familiar objects 9.1: Children demonstrate initiative, engagement, and persistence. 9.2: Children show creativity and imagination. Math 4.3: Children begin to conceptualize measurable attributes of objects and how to measure them. Math 4.4: Children develop spatial and geometric sense.						Notes:

Sensorial: Auditory Discrimination									
Purpose:	The purpose of these materials is to develop sound discrimination.	Materials/Activities	Sound cylinders, sound/no sound	Beginning	Child can identify the difference between the loudest and softest sound. May be able to locate those 2 extremes from both boxes and match them.	Leads to:	Increased ability to distinguish between sounds as skill used in learning	Level	Fall: Spring: Notes:
State Standards:	RF-PK.2: Demonstrate understanding of spoken words and begin to understand syllables and sounds (phonemes). 9.1: Children demonstrate initiative, engagement, and persistence. 5.1: Children develop inquiry skills. 5.2: Children observe and investigate matter and energy			Progressing	Child can identify 2 extremes and can match between red and blue boxes.		Child can grade and match all sounds; use auditory memory to match sounds even after a delay between hearing sounds. Able to give this lesson to another child.		
Advancing	Child can grade all 6 sounds from loudest to softest as well as match sounds between two boxes.	Independent	Child can grade and match all sounds; use auditory memory to match sounds even after a delay between hearing sounds. Able to give this lesson to another child.	Leads to:	Preparation for writing, fine motor activities				

Sensorial: Stereognostic Discrimination									
Purpose:	The purpose of these activities is to develop muscular memory and the tactile sense.	Materials/Activities	Mystery bag, blindfold extensions with other materials	Beginning	Can match previously seen items using stereognostic sense.	Leads to:	Preparation for writing, fine motor activities	Level	Fall: Spring: Notes:
State Standards:	9.1: Children demonstrate initiative, engagement, and persistence. 9.3: Children identify and solve problems. 5.1: Children develop inquiry skills. 5.2: Children observe and investigate matter and energy.			Progressing	Can match previously seen items using stereognostic sense. Can identify well known objects using stereognostic sense.		Can match previously seen items, can identify well known objects and can sort items using stereognostic sense.		
Advancing	Can match previously seen items, can identify well known objects and can sort items using stereognostic sense.	Independent	Can match previously seen items, can identify well-known objects and can sort items using stereognostic sense; makes educated guesses about them using stereognostic sense.	Leads to:	Preparation for writing, fine motor activities				

Sensorial: Tactile Discrimination									
Purpose:	Materials are used to develop the sense of touch as well as discrimination of temperatures and weight. Develops associated vocabulary.	Materials/Activities	Fabric boxes, baric cylinders/stablers, rough and smooth boards, rough or smooth gradation boards, thermic bottles/stablers	Beginning	Child can identify and match the 2 extremes (lightest/heaviest, rough/smooth, hot/cold) or match 2 fabrics by touch.	Leads to:	Development of skills to make scientific inquiries. Preparation for sandpaper letters and numbers.	Level	Fall: Spring: Notes:
State Standards:	L/PK.5: Begin to sort familiar objects. L/PK.5b: Begin to understand opposites of simple and familiar words. 9.1: Children demonstrate initiative, engagement, and persistence. 9.3: Children identify and solve problems. 5.1: Children develop inquiry skills.			Progressing	Child can identify and match extremes and one other. May be able to use correct vocabulary.		Child can identify and match all variances in material. Child uses correct vocabulary. Child can give lessons to another student.		
Advancing	Child can identify and match all variances in material. Child uses correct vocabulary.	Independent	Child can identify and match all variances in material. Child uses correct vocabulary. Child can give lessons to another student.	Leads to:	Development of skills to make scientific inquiries. Preparation for sandpaper letters and numbers.				

Sensorial: Olfactory Discrimination									
Purpose:	Children learn how to discriminate between scents, how to smell a material safely and develop related vocabulary.	Materials/Activities	Smelling bottles	Beginning	Child can identify the difference between 2 scents. May be able to locate those 2 scents from both boxes and match them.	Leads to:	Development of skills to make scientific inquiries.	Level	Fall: Spring: Notes:
State Standards:	5.1: Children develop inquiry skills. 9.1: Children demonstrate initiative, engagement, and persistence. 9.3: Children identify and solve problems.			Progressing	Child can identify 3 scents and can match from two boxes.		Child can match all scents; can use olfactory memory to match scents even after a delay; able to give this lesson to another child.		
Advancing	Child can match all 6 scents and match scents between two boxes.	Independent	Child can match all scents; can use olfactory memory to match scents even after a delay; able to give this lesson to another child.	Leads to:	Development of skills to make scientific inquiries.				

Appendix E New Toddler Progress Report

Montessori Developmental Progress Report: Toddler Practical Life

Details		Term Result	
Student name	Jane Doe	Term starts	Fall 2014
Age	35 mths	Term ends	Spring 2015
Year	Second	Tardy	Fall: 4
Teacher name	Ms. Smith	Absent	Spring:
		Date:	Nov. 14, 2014

Practical Life: Work Cycle	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Process of independently choosing work from many options, completing the work with purpose, and returning the work to it's original location.	Must be brought to find work from shelf, completes tasks only with teacher direction. Does not yet recognize work on their level.	Chooses work from shelf with frequent reminders and teacher direction. May recognize and choose work on their level.	Chooses work from shelf with minimal reminders, completes tasks with minimal teacher direction. Can frequently find work on their level.	Chooses work from shelf independently, needs little teacher direction.	Development of concentration, coordination, independence and how to manage choices independently.	<p>Fall</p> <p>Independent</p> <p>Spring</p>	<p>Jane has made great progress this school year. She is independently choosing challenging activities and she displays good concentration.</p>
State Standard: AL.1.12 Demonstrates preferences & makes independent choices							

Rolling & Unrolling a Mat	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Using two hands bilaterally the child unrolls mat and smooths flat. Using two hands bilaterally child makes small folds in mat repeatedly until it rolls into a cylinder	Child brings mat to floor and with adult assistance unrolls mat. When rolling, adult makes first few rolls then child uses whole hand to "push" the mat into a loose cylinder.	Child uses whole hand to unroll mat and needs adult assistance to flatten mat. When rolling adult starts first few rolls and child makes large folds while trying to roll mat.	Child can unroll mat and sometimes needs help smoothing it out. When rolling, child may need help starting the first few rolls but is otherwise able to roll mat into a tight cylinder.	Child can unroll mat and smooth it out. When rolling, child makes small folds to roll into a tight cylinder.	Independent skills hand control Attention to detail	<p>Fall</p> <p>Advancing</p> <p>Spring</p>	<p>Jane needs help getting started rolling the mat but then pays careful attention to each turn and takes pride in her tightly rolled cylinder!</p>
State Standard: PM.10.5 Increase strength & muscle control of small muscles in the hand							

Carries a Tray with Work	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Lifts, carries and balances trays while maneuvering around furniture and other people.	Carries tray with adult assistance and is guided to the table by an adult.	Attempts to carry trays independently & maneuver through classroom with some success.	Can usually lift and balance trays while maneuvering around furniture & others with ease.	Can lift, carry and balance tray from shelf to table with grace.	Balance, Coordination Agility Concentration	<p>Fall</p> <p>Advancing</p> <p>Spring</p>	<p>Jane has become much more confident carrying a tray across the room. Her coordination and balance has improved greatly since last spring!</p>
State Standard: CE.9.2 Demonstrate increased coordination in movements and gestures. PM.10.4 aa Demonstrate muscle control and balance. PM.10.4z Increase balance & muscle control							

Hand Washing	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Child turns on faucet, runs water over hands, rubs soap over hands, rinses water off and dries hands	With adult assistance, child turns water on, pumps soap, rubs soap over top & bottom of hands, rinses hands completely of soap, turns off water and dries hands.	Child turns on water but needs help regulating force and temperature. Child uses soap pump but is inconsistent with appropriate quantity. Child does not get all dirt off and when rinsing and does not get all soap off consistently.	Child is able to regulate water, uses appropriate amount of soap, is inconsistent about rubbing in soap and rinsing hands. Can dry hands independently.	Child is able to regulate water, uses appropriate amount of soap, rubs soap over whole hand, rinses all soap off, turns off water and dries hands.	Independence Sequencing of thoughts Concentration Attention to Detail	Fall Spring	
State Standard	PS 2.4 Understand that hand washing initiated by an adult is a self-help skill SEP 3.2 & PS 2 Develop self regulation, self control, and self help skills						

Walking on the Line	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Child walks heel to toe on a taped line with hands at their side or while carrying an object	Child follows line but does not keep balance or stay on line.	Child is more consistent of staying on the line but takes large steps and loses balance sometimes.	Child is walking heel to toe following the line and balances most of the time. May spread arms out to balance.	Child walks heel to toe, balancing, while following the line holding hands behind back or with an object in hand.	Motor planning (running, kicking a ball, climbing, etc.) Development of self control	Fall Spring	
State Standard	10.4aa Demonstrate muscle control and balance 10.4bb Demonstrate eye/hand coordination & muscle control						

Transferring Activities	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Spoonng, pouring, tongs, baster, droppers, sponges - all foster concentration, directionality (left to right) hand control, fine motor/pincer grasp,	Uses fist grip to hold object and transfers making several spills. Repeats transfer a few times.	Fist grip is beginning to refine and transferring is more consistent and child is repeating the transfer more.	Child is using a three finger grasp and transferring consistently with relative ease. Child repeats transfer many times and displays concentration.	Child is using a pincer grasp and is able to transfer objects with ease. Child repeats transfer many times and displays good concentration.	Dressing Skills Using Utensils Drawing/Coloring Handwriting	Fall Spring	
State Standard	PM.10.5q Increase strength & control of small muscles in the hands. M10.5o Increase Eye/hand coordination as pincer grasp develops						

Washing/Polishing Activities	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Table Washing, Silver Polishing, etc. are multiple step activities in which the child needs to think in sequence in order to be successful.	Child uses activity for short periods at a time but not necessarily in sequential order and does not complete a full work cycle.	Child does activity in sequential order sometimes and usually completes a full work cycle.	Child uses activity more consistently in sequential order and is developing longer concentration.	Child uses activity in sequential steps (First, second, third) with little to no effort & displays good concentration.	Coordination Concentration Independence Care for the environment Sequential Thought	Fall Spring	
State Standard	AL.1.14 Engage in pretend and symbolic play and games that require several, sequential actions AL.2.YT.B Know the sequence of familiar routines.						

Tops & Bottles, Lock & Key	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Child puts two parts of an object together to create a functional outcome	Child puts two items together but not necessarily with a productive outcome.	Child begins to have better hand control and is making progress toward a desired outcome.	Child's hand control is becoming more refined and child is usually successful manipulating two objects/items.	Child easily manipulates two items to work together for a desired outcome.	Bilateral Coordination skills such as, dressing, writing, cutting, etc.	Fall	
State Standard PM 10.5m: Twist wrist to turn hand & manipulate it with the other PM 10.5p Hold an item with one hand and manipulate it with other AL 4. OTC Attempt problem solving activities to achieve a positive outcome.						Spring	

Dressing Frames	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Velcro, Button, zipper, Snap & Buckle Frames	Child tries to manipulate the item with one hand.	Child understands that two hands are needed but is not consist any successful in using second hand to support first hand.	Child is becoming more re-fined with hand movements and success with item is more consistent	Child is able to manipulate item easily using both hands.	Independent skills Hand Control Fine Motor Refinement Dressing Self	Fall	
State Standard PM 10.5p Hold an object with one hand and manipulate it with the other PM 10.5q Increase strength & control of small muscles in the hands						Spring	

Food Preparation	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
Description Spreading on a cracker, cutting an apple, slicing a banana, peeling & slicing an egg, etc.	With adult assistance child is guided through the sequential steps and motor skills are immature.	Needs less adult assistance with sequencing and hand control is improving.	Goes through steps sequentially, is more successful independently with hand control and fine motor.	Can sequence steps independently, and is able to manipulate tools using more mature fine motor ability. Practice Grace & Courtesy by sharing with friends.	Fosters fine motor skills such as holding a writing utensil, develops independence, concentration and sequential thinking.	Fall	
State Standard PM 10.5q Increase strength & control of small muscles in the hand AL 1.14 Engage in pretend & symbolic play & games that require several sequential actions						Spring	

Visual Discrimination: Size & Dimension	Description	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
	Foster perceptions of differences in dimensions, develops attention in working with sequences & systematic operators, develop reasoning skills, fine motor control & comparative vocabulary	Child can grade material from largest to smallest with adult assistance. Child may not see errors in grading. Needs adult assistance in taking activity out and putting away.	Child can grade material from largest to smallest with adult assistance. Begins to recognize errors in grading, needs adult assistance in putting material away.	Child can grade material from largest to smallest independently. Child self corrects errors in grading. Can take out & put away material with minimal assistance.	Child can grade material from largest to smallest independently. Child can take out and put away material independently and self corrects errors in grading. Child can give lessons to other children.	Visual Discrimination Problem Solving Math Skills Pincer Grasp	Fall	
	Materials Knobbed Cylinders, Cube Tower, Broad Stair, Red Rods						Spring	
	State Standard AL 3.24 Demonstrate more complex concept knowledge PM.10.5 Create simple block structures 2.4.YT.A.1 Engage in measurement experiences 2.4.OT.A.1 Use basic measurement vocabulary. 2.1.YT.MP Engage and persist when measuring and sorting objects							

Visual Discrimination: Color & Form	Description	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
	Foster perceptions of differences in color and geometric shapes	Can match Color Box I and sometimes name the colors. Can point to some shapes and geometric solids when asked. Can sort by one attribute.	Has mastered Color Box I and can match and name most colors in Color Box II. Can Recognize basic shapes. Can point to geometric solids when asked.	Can name most colors or shape without prompts.	Can name all colors and shapes independently.	Math Skills Categorizing	Fall	
	Materials Color Boxes I & II Geometric Solids, Sorting Activities						Spring	
	State Standard 2.4 OT.A2 Participate in sorting objects 2.4 OT.A2. Classify objects and count the number of objects in each category 3.21.A.1 Describe objects by their characteristics							

Stereognostic Discrimination	Description	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
	In this activity the child practices identifying objects by touch alone.	Child explores object with hands and learns the feel of each object.	Child either closes eyes or used blindfold and can identify one to three objects in bag with hands or with adult or another student's assistance.	Child either closes eyes or used blindfold and can identify three objects in bag with hands, with another student's assistance or independently.	Child either closes eyes or used blindfold and can identify all of the objects in bag with hands independently.	Tactile Discrimination	Fall	
	Materials Mystery Bag						Spring	
	State Standard 2.1.1.A.1 Explore objects AL.1.OT.A Explore characteristics of and ask questions about objects people, activities and environments.							

Montessori Developmental Progress Report: Toddler Sensorial

Kinesthetic Discrimination - Size/Weight	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
<p>Description</p> <p>Materials are used to develop the sense of size and weight. Develops associated vocabulary.</p>	With adult assistance the child brings objects to mat and sequences them while the adult enumerates the description.	The child brings the objects to the mat and sometimes sequences them in order. While doing so, the adult cues the descriptive language.	The child brings the objects to the mat and usually sequences them. The child can enunciate the descriptions correctly.	The child sequences the objects correctly and independently while reciting the description.	Fine Motor Development Motor Planning Coordination	Fall	
<p>Materials</p> <p>Cube Tower, Broad Stair, Red Rods</p>						Spring	
<p>State Standard</p> <p>2.3.OT.MP Use mathematical processes when creating and composing shapes. 2.4.YT.A.1 Engage in measurement experiences. 2.4.OT.A.1 Use basic measurement vocabulary.</p>							

Kinesthetic Discrimination - Touch	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
<p>Description</p> <p>Materials are used to develop the sense of touch as well as discrimination of temperature and weight. Develops associated vocabulary.</p>	The child feels the object while the adult enunciates the descriptive word.	The child feels each object and enunciates the descriptive word with cues from the adult.	The child feels each object while usually using the correct description.	While using a blindfold the child is able to discriminate the object and name the descriptive correctly.	Tactile Discrimination	Fall	
<p>Materials</p> <p>Texture Boards, Sandpaper Tablets, Geometric Solids</p>						Spring	
<p>State Standard</p> <p>AL.1 Constructing and Gathering Knowledge AL.1.OT.A Explore characteristics of and ask questions about objects people, activities and environments</p>							

Auditory Discrimination	Beginning	Progressing	Advancing	Independent	Leads to:	Level	Notes
<p>Description</p> <p>Refine discrimination of sound</p>	Can discriminate a loud cylinder from a quiet cylinder	Can discriminate two extremes and match sounds.	Can begin to grade sounds.	Can match and grade sounds independent.	Early Literacy	Fall	
<p>Materials</p> <p>Sound Cylinders</p>						Spring	
<p>State Standard</p> <p>1.1.OT.C Categorize familiar sounds</p>							

Appendix F: Survey for Teacher Feedback on New Progress Report

By completing these questions, you are giving your consent to participate in this study. Completing this feedback form is completely voluntary and you may quit at any time. Completion of these questions is confidential. The tool will not collect your email or log in information, and the researcher will not know who completed this form.

* Required

1. Were the new reports more or less useful than the current reports? In what ways? *
2. How long did the form take you to complete per child? *
 - 5-10 minutes
 - 10-20 minutes
 - 20-30 minutes
 - more than 30 minutes
3. What, if anything, did you find to be confusing? *
4. What, if anything, about the specific topic areas did you find beneficial? *
5. The progress report forms a strong alignment between the childhood development benchmarks and the Montessori materials and/or activities. *
 - Always
 - Almost always
 - No opinion
 - Not always
 - Never
6. Do you feel like the progress report will help parents better understand the purpose of the Montessori materials and/or activities? *
 - Yes
 - No
7. How many years have you been a Montessori directress? *
 - 0-5 years
 - 6-9 years
 - 10-14 years
 - 15-19 years
 - 20+ years
8. Is there anything else you would like the researchers to know about the progress report?

Appendix G: Survey for Parent Feedback on Newly Created Progress Report

By completing this feedback form, you are giving your consent to participate in this study. Completing this feedback form is completely voluntary and you may quit at any time. Completion of these questions is confidential and no identifiable information is collected.

* Required

I would like my responses to be included in the study. *

- Yes, please include my responses in the study.
- No, I would prefer my responses not be included.

If you would like to include your responses in the study, please enter the first three letters of your mother's maiden name plus the date of the month of your birth. For example, RHO24

For anonymous tracking purposes only

1. The new progress report explains the link between the Montessori materials/activities and developmental benchmarks (state standards). *

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

2. I feel more knowledgeable about the link between the Montessori materials/activities and developmental benchmarks (state standards). *

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

3. I more fully understand the purpose of the Montessori practical life and sensorial materials. *

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

4. With a new tool to understand the Montessori materials, I place greater value on the work accomplished within the Montessori environment. *

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

5. I find the new progress report format a better tool than the previous format to understand my child's development. *

- Strongly agree
- Agree
- No opinion
- Disagree
- Strongly disagree

6. In what ways did you find this report beneficial? *

7. In what ways did you find this report confusing? *

8. Is there anything else you would like the researchers to know about this project?