This paper will propose an approach to developing an Early Care and Education Program Quality (ECEPQ) instrument based upon key indicator research focusing on quality initiatives and child development research studies. The dependent variable in all these initiatives and studies is how well the child is doing in the respective ECE program (CO). The intervening variable that produces these positive aspects are adult-child interactions (ACI). The predicting variables which will be the focal point of this newly proposed tool are the following: A) Enhanced professional development represented by highly qualified ECE teachers, B) Developmentally appropriate/individualized curricula driven by developmental assessments, C) Language-based interactions between teachers and children, and lastly D) Enhanced family engagement.

These predicting variables will be drawn from past research in identifying key indicators in quality rating and improvement systems (QRIS), quality initiatives dealing with professional development of ECE teachers, and program quality studies.

The following ten questions/statements/standards/requirements/rules are drawn from these predictor variables/indicators that should be part of the newly proposed ECEPQ:

1) The number of ECE AA and BA teachers? (A)
2) The number of ECE in-service ECE coaching or reflective supervision opportunities engaged in by ECE teachers? (A)
3) There is a developmentally appropriate curriculum that is individually based upon the developmental assessments of each child in the respective ECE classroom. (B)
4) The program provides opportunities for staff and families to get to know one another. (D)
5) Families receive information on their child's progress on a regular basis, using a formal mechanism such as a report or parent conference. (D)
6) Families are included in planning and decision making for the program. (D)
7) Teachers encourage children to communicate. (C)
8) Teachers use language to develop reasoning skills. (C)
9) Teachers listen attentively when children speak. (C)
10) Teachers speak warmly to children. (C)

\[ CO \iff ACI \iff A(1+2) + B(3) + C(7-10) + D(4-6) \]
Here is the detail on the 10 questions/statements/standards/requirements/rules, in addition 3 rules are taken from the licensing/regulatory compliance health and safety key indicator research and added to the other 10 program quality key indicators:

**Professional Development and Staffing:**

1) The number of ECE AA and BA teachers? (A) This is a straightforward question in which assessors will review staff records in order to determine the number of staff who have AA or BA degrees in early care and education. These degrees can extend into human development, but elementary education degrees would not count in meeting this requirement. Record the number of teachers with the appropriate degrees and divide by the total number of teachers in order to come up with an average for the center. Average = ________

2) The number of ECE in-service ECE coaching or reflective supervision opportunities engaged in by ECE teachers? (A) Assessors will need to see either in staff records or if the information is not recorded there, the state professional development registry records to determine the number of opportunities staff have had related to in-service coaching or reflective supervision opportunities. Record the total number of opportunities that have been accessed by ECE teachers and divide by the total number of ECE teachers to come up with an average for each staff person. The higher the average number the better. Average = ________

**Developmentally Appropriate Curriculum:**

3) There is a developmentally appropriate curriculum that is individually based upon the developmental assessments of each child in the respective ECE classroom. (B) The key for this question/standard is that the program is following an individualized prescribed planning document when it comes to curriculum. It does not mean it is a canned program, in fact, it shouldn’t if it is based upon the individual needs of each child’s developmental assessment. The assessor will ask to see what is used to guide the curriculum. There should be a written document that clearly delineates the parameters of the philosophy, activities, guidance, and resources needed for the particular curricular approach. There should also be a developmental assessment which is clearly tied to the curriculum. The developmental assessment can be home-grown or a more standardized off-the-shelf type of assessment, the key being its ability to inform the various aspects of the curriculum. The purpose of the assessments is not to compare children but rather to compare the developmental progress of individual children as they experience the activities of the curriculum. Take a sample of children’s records to make certain that developmental assessments are driving the curriculum planning for that specific child. Record the number where this occurs and doesn’t. Record as a percent of total number of children enrolled. Percent = ______%.

**Family Engagement:**

4) The program provides opportunities for staff and families to get to know one another. (D) There should be activities both within the center as well as off site where staff and parents have opportunities to meet and greet each other. Providers make home visits in order to learn about each family. Information is made available to families in their preferred language. Communication with family members is documented and enables early childhood providers to assess the need for follow-up. Early childhood providers hold regular office hours when they are available to talk with family members either in person or by phone. Family members are encouraged to lead the conversation and to raise any questions or concerns. List the types of activities. Number = ________

5) Families receive information on their child’s progress on a regular basis, using a formal mechanism such as a report or parent conference. (D) Based upon #3 above, the information gleaned from the developmental assessments should be the focus of the report or parent conference. Parental feedback about the assessment and how it compares to their experiences at home would be an excellent comparison point. All these interactions should be done in a culturally and linguistically appropriate way representing the parents being served. Providers make home visits in order to learn about each family. Record the number of reports completed or parent conferences over the past year. Number = ________

6) Families are included in planning and decision making for the program. (D) There should be regular meetings
where staff and parents can come together to talk about the overall curriculum for the program. This can act as an informal formative evaluation of the overall program looking at all aspects of how the center is being run. How communication is flowing from administration to staff to parents and the other way around. Families are always encouraged to visit and the program has an open-door policy for families. List the types of activities used by the program. Number = ________

Language-Based Interactions:

7) Teachers encourage children to communicate. © Assessors will need to observe this item when they do their classroom observations. Initially you can ask teachers or the director how children are encouraged to communicate but in order to gather reliable and valid information regarding this question/standard, it needs to be observed in the various interactions of staff and children. Things to look for would be more back and forth conversations rather than one-way conversations where teachers are telling children what to do. Look for opportunities where children can describe what they are doing, how they feel about what they are doing, and why they are doing the particular activities. Teachers expand upon children’s conversations. These opportunities can occur anywhere in the classroom or outside, such as in dramatic play, table top activities or on the playground. Do this in timed 2-minute observations recording each time you observe this occurring. Total up the number of positive observations. Number = ________

8) Teachers use language to develop reasoning skills. © Assessors will need to observe very carefully because this standard can be difficult to determine because it is tying language and cognition together. Again this opportunity can occur in any setting in or out of the classroom because it is the basis for problem solving through the use of language. Also look for teachers redirecting children’s conversations when appropriate. Do this in timed 2-minute observations recording each time you observe this occurring. Total up the number of positive observations. Number = _______

9) Teachers listen attentively when children speak. © Children should have the undivided attention of the specific teacher they are addressing. Teachers should not be looking away or pre-occupied with others. They should be at the child’s level making eye contact. Do this in timed 2-minute observations recording each time you observe this occurring. Total up the number of positive observations. Number = ________

10) Teachers speak warmly to children. © Teachers do not use harsh language or commands in speaking to children, but rather again are on the child’s level making eye contact. Think of the way Fred Rogers would engage his audience where you always felt you were the most important person in the world when he talked into the TV. Do this in timed 2-minute observations recording each time you observe this occurring. Total up the number of positive observations. Number = _________

Health and Safety:

11) Children’s immunizations are up to date. (E) This is always an interesting standard but one that is very difficult to attain because of the level of detail. Check the children’s records for their immunizations. Determine the level of completeness and if they are up to date. Record the number and divide by the total number of enrolled children to attain a percent. The higher the percent, the better. Percent = ________%

12) The program is a hazard free environment. (E) A straightforward standard in doing an environmental scan to determine if any potential hazards are present from trip hazards, to toxic materials accessible to children. This is one of the most highly cited rules/regulations/standards when doing regulatory reviews. Record the total number of violations of this standard and what they were. Number = ________

13) There is proper supervision at all times. (E) This standard will occur throughout the assessor’s observations at the center and the assessor should record any time a child or children are left unsupervised. This can be in or out of the classroom or in or out of the center. Pay particular attention to transition times when it is easy to lose sight of the number of children under supervision – moving from classrooms to the playground or going on a field trip either involving transportation or not. Record any instances of the lack of supervision. Number = ________
These 13 standards/requirements/rules are drawn from 40 years of key indicator research in both regulatory compliance and licensing systems as well as program quality systems, such as QRIS and professional development systems.

Below is a chart that summarizes the above standards into a score sheet and scaling protocol, followed by algorithms/equations depicting the relationship of the 13 standards and how they can be computed into an overall score for an ECE program.

**ECERCPQ Score Sheet and Scale (Fiene©2020)**

<table>
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<th>Standards</th>
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<th>Scale</th>
<th>Score</th>
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<td>2</td>
<td>Average Number of Teachers</td>
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Total ECERCPQ Score = (1 + 2) + (3) + (4 + 5 + 6) + (7 + 8 + 9 + 10) + (11) - (12) - (13)

ECERCPQ = Σ ((Ã + ã) + (%) + (n̅ + ň + ň̅) + (n̅ + ň + ň + ň̅) + (%) - Σ ((n̅) - (n̅))