

**Tamil Nadu Early Childhood Environment Rating  
Scale**

**TECERS**

**Barbara J. Isely**



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**M. S. Swaminathan Research Foundation**

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# Tamil Nadu Early Childhood Environment Rating Scale (TECERS)

by

*Barbara J. Isely*

## A. Creation of TECERS

The tool to observe the centre environment was based on the Early Childhood Environment Rating Scale (ECERS) created by Harms and Clifford (1980) and was modified by Barbara J. Isely specifically for the Indian situation. While the ECERS has been used in several different cultures (at least in 5 countries as reported by Kathy Sylva in personal discussion), a major drawback of the Harms and Clifford tool was immediately identified. Most items contain many, not mutually exclusive dimensions. That is, the multiple dimensions do not necessarily vary together. For example, for item 3 on nap and rest (Harms & Clifford, 1980, p. 13), the first and lowest category clearly included three different dimensions: timing, location, and supervision. Examples given for that category, presumably for clarification, added four more dimensions: length of nap, regularity, noise, and ventilation. Further, in the rest of this item, even more dimensions (e.g., relaxation, flexibility, and space) were added. Thus, the seven-point item covered 10 dimensions. The instructions on how to make a single numerical rating using the many dimensions, contained the words 'all' and 'part of the . . . description' (1980, p. 2 ). While 'all' can contribute to a clear operational definition, 'part' is ambiguous.

Although Harms and Clifford reported the tool was highly reliable, the Tamil Nadu research team could not see how they had achieved such reliability using the multiple-dimensioned items with such vague operational definitions. The team wondered if the training for use of ECERS in some way clarified or expanded upon the operational definitions so the different categories of a single item could meet a basic scientific requirement of being mutually exclusive. No such detailed training instructions were at hand.

The multiple dimensions of individual items were also extremely difficult for an observer to keep in mind simultaneously. Indeed, there was insistence by one highly educated team member that she, being untrained in Child Development, could not use the tool, and that evaluation done with ECERS would need to be done by persons trained in Child Development. Not enough such persons were available for the study. Despite the lack of clear operational definitions and the complexity of the items, the many ideas from ECERS were extremely useful, and it was decided to adapt the tool.

It should be noted that the very recently published instructions for a revised version of ECERS (Harms and Cryer, 1999) which were received during the process of the research explicitly operationalized the procedures. The word 'part' in the 1980 version

was replaced by 'at least half' (1999, p. 3). This instruction met more rigorous standards for an operational definition and permitted the multiple dimensions to be treated as mutually exclusive in the revised ECERS. Despite this much needed improvement which greatly strengthened ECERS, the adaptation is more appropriate for the conditions in India.

The adaptation done by Barbara J. Isely consisted of dividing each multi-dimensional item into more than one item, trying to keep each item as a measure of only one dimension, or two at the absolute maximum. Most items were put on a three point scale. A few items were to be rated by simply counting the number of times a certain type of activity occurred; these had a potential of 6 points and in analysis were converted to 2 points by dividing by 3.

While the 1980 Harms and Clifford ECERS had only 37 items to be rated, it actually included far more than 100 different dimensions. The number of dimensions was cut by selecting dimensions which were felt to be most important to children's learning and appropriate in the Early Childhood Education settings found most often in Tamil Nadu. Some dimensions were added which were lacking in the ECERS, particularly in the area of social and emotional development. Persons who were qualified and experienced in Early Childhood Education in India tested and/or gave feedback on the tool. The scale, called the Tamil Nadu ECERS (TECERS) had 60 items in the end (Section B).

The three point, one dimensioned items and the items involving counting one kind of activity were much easier for observers to use than the multi-dimensioned items in the original ECERS. It was thought that ease of use of TECERS would contribute to greater reliability. It is interesting that the 1999 revised version of the ECERS also had modifications which essentially make it possible for observers to focus on one dimension at a time. Also, in light of the frustration of not having training instructions which we thought might have some crucial definitions, we tried to create a tool which, in addition to being easy to use, would be as self-evident and complete in itself as possible. This effort included embedding unambiguous operational definitions in each item when needed. These embedded definitions are intended to prevent situations which often occur when a research tool becomes separated from the instructions necessary for its use. It is hoped that the easy and complete format of the tool will facilitate its wider use by researchers, administrators, and teachers.

TECERS was designed to be used during two days of observation. While, as Harms and Clifford suggested (1980), the ECERS tool can be used by insiders to evaluate their own centre, it was felt that the two or three hours proposed for use by outsiders was not adequate in the Indian setting. The centres in this study are open for operation only about three to four hours, in contrast to a possible 8 to 12 hours in the United States where the tool was created. In addition, the number of staff members per child is much lower in India. In the shorter time in which attendance and other administrative activities

must be done by the teacher, and with fewer staff, fewer different teaching/learning activities are likely to take place in two or three hours. Harms and Clifford also suggested that outside observers could consult daily schedules and lesson plans for added information. Persons experienced in Early Childhood Education in India advised that schedules and lesson plans, often imposed from above, are not necessarily accurate indicators of the actual activities in an Indian centre. With these considerations in mind, it was decided to have the observers in this study (all outsiders to the centres) use two days to observe a centre.

TECERS covers 7 areas or domains of learning environment inputs referred to as components: infrastructure, personal care and routine, physical learning aids, language and reasoning experience, fine and gross motor activities, creative activities, and social development. For analysis, the scores for each of the seven components in TECERS were converted to percentages by adding the observed points and dividing those by the highest total number of point possible for that component (see Appendix 8 on computation of variables). Thus each component's score was on a comparable scale (0 to 100) with each other component even though the number of items varied from component to component. This facilitated comparison of one component with another.

The tool was validated by four independent specialists in Early Childhood Education located in Madras (Chennai) and one specialist in Gandhigram. The following procedures were followed. In a group, the tool was carefully examined item by item, discussed, questions clarified, and some common understanding reached and included in the tool. After that, each of the four specialists was asked to complete the rating over a period of two days in a specified setting. Each specialist in Chennai was assigned to rate a specific type of centre (ICDS, NGO, and private). Because there are no TINP centres in Chennai, two specialists observed NGO centres. In Gandhigram the specialist rated one each of the four types of centres. No specialist was familiar with any centre assigned to her; none had ever visited the observed centres before. After an interval of a few weeks the ratings were again examined item by item and discussed in another group meeting of the four Chennai specialists. The procedure was repeated separately with the Gandhigram specialist, after which the tool was finalised.

## **References**

Harms, T.; Clifford, R.M. (1980). Early Childhood Environment Rating Scale, Teachers' College Press, London.

Harms, T.; Cryer, D. (1999). Video Guide and Training Workbook for the Early Childhood Environment Rating Scale, Revised Edition, Teachers' College Press, New York.

Observer \_\_\_\_\_

Centre ID # \_\_\_\_\_

Dates Observed \_\_\_\_\_

Centre name \_\_\_\_\_

### TAMILNADU EARLY CHILDHOOD ENVIRONMENT RATING SCALE -- SCORE SHEET

This tool is for use by individual teachers, supervisors, or program administrators to improve learning and care environments for children, as well as by researchers. Tool details are useful both to evaluate conditions and well as to give specific information on directions for change.

#### GENERAL INSTRUCTIONS

The tool is an OBSERVATION guide. Information is NOT to be gathered by asking questions, except where directed as a last resort for items 19, 26. Scoring is based on actual observations, that is, on the conditions when the centre is observed. If conditions are reported as different at another time (e.g., presence or absence of stagnant water at other seasons), score what is actually observed. Carefully note differences among items that focus on what is available, no matter what is used (see items 2-4, 20-23) in contrast to what children do (see 13, 16, 27, 28, 35, 37, 39, 41, 42-45). If an observer feels a teacher may have changed in response to the observer's presence, write that in the right margin. Observers must clearly learn concepts of less than, more than, especially that less than 1/3 includes none, but not 1/3; that more than 2/3 includes all, but not 2/3; and 1/2 or fewer includes half. For example, among 30 children, 10 is not included in "less than 1/3," and 20 is not "more than 2/3." Both 10 and 20 are included in "one to two thirds."

When used by an outside evaluator, the tool is designed for two observation days. On day one observe without looking at the tool. After observation at the centre, leave the centre and complete the items on which full information is available. Note which items require continued observation on the second day. On day two, observe as much as possible without looking at the tool, but check it periodically to see what items remain to be observed. On items which refer to amount per day, score an average for the days observed.

Clearly and neatly circle the one score (0, 1, or 2) that is appropriate for each item. If you cannot score an item, write NA (not applicable) left of the scores. Make no other marks on the left side of the page. You **must** write an explanation on the right side of the schedule every time you use NA.

#### INFRASTRUCTURE -- FURNISHING, PHYSICAL SETTING

1. Availability of Water at Toilet
  - 0 Toilet is not available or is not used by any child.
  - 1 Toilet is used, but there is no water.
  - 2 Toilet is used, AND there is water.
2. Classroom Space
  - 0 Classroom space is just enough for all children attending to sit in one room, but **not enough for activities**.
  - 1 Classroom space is enough for all children attending to sit in one room, but is **crowded for activities**.
  - 2 Classroom space is enough for children attending to **do all indoor activities**.
3. Space for Gross Motor Play
  - 0 Both outdoor and indoor space is inadequate for gross motor activities.
  - 1 Space is available for gross motor activities either outdoors or indoors, but not both.
  - 2 Adequate space is available both outdoors and indoors for gross motor activities.

4. Water Available to Children (Include water carried from outside.)
  - 0 Drinking water and washing water are not adequate.
  - 1 Either drinking or washing water is available and adequate
  - 2 Both drinking water and washing water are available and adequate.
  
5. Hazards -- **Tick** the specific hazardous conditions that exist **and circle** the code.
  - Motor vehicle traffic,
  - Open well,
  - Pond,
  - Large animals tied or roaming,
  - Open sewer holes or drain,
  - Dangerous electrical equipment,
  - Roaming dogs.
  - Write other hazard which could cause injury or death.
  - 0 Within 10 metres of the building or play area and without a protective barrier there is one or more of these hazards.
  - 1 Beyond 10 metres of the building or play area and without a protective barrier there is one or more of the hazards.
  - 2 A protective barrier, such as a good wall and lockable gate is between the children and the hazards, or there are no hazards.
  
6. Unclean Surroundings -- **Tick** the specific conditions that exist **and circle** the code.
  - open defecation or urinating area,
  - stagnant water or damp ground providing breeding places for flies and mosquitoes,
  - garbage dump,
  - open drain.
  - Write other unclean condition: \_\_\_\_\_
  - 0 Within 10 metres of the building or play area and without a protective barrier there is one or more of these unclean conditions.
  - 1 Beyond 10 metres of the building or play area and without a protective barrier there is one or more of the unclean conditions.
  - 2 A protective barrier, such as a good wall and lockable gate is between the children and these unclean conditions, or there are no unclean conditions.
  
7. Noise Pollution
  - 0 Sound from outside sources prevents hearing of speech **more than half** of time.
  - 1 Sound from outside prevents hearing of speech heard for **half or less** of the time.
  - 2 Sound from outside sources does **not** prevent hearing of speech.



8. Condition of Building – A condition exists to an extent to create risk or harm to children or interfere with pre-school activities. **Tick** specific conditions that exist **and circle** the code.

- broken or uneven floors,
- leaking roof,
- falling roof material,
- wall plaster – broken or severely cracked surface,
- inadequate number of windows, or broken windows or doors.
- inadequate lighting,
- ventilation so inadequate that smoke is in classroom,
- door which cannot be closed or latched,
- kitchen activities take place in classroom
- Write other condition. \_\_\_\_\_

- 0 Three or more of the conditions exist
- 1 Two of the conditions exist.
- 2 None or one of the conditions exists.

9. Storage Available for Teacher

- 0 No storage is available for teacher to keep to keep her records, and other non-teaching materials.
- 1 Some storage (cupboard, box, rack) is available for the teacher, but it is inadequate.
- 2 Storage for teacher is adequate.

10. Table or Chair Available for Teacher

- 0 No table, or chair/stool/bench is available for teacher to use, or only one is available.
- 1 Table and chair/stool/bench are available for use, but one or both are difficult to use (e.g., nearly broken, so must use with care).
- 2 Both table and chair/stool/bench are available for use and in good condition.

11. Storage for Play Materials

- 0 No storage is available to keep play materials.
- 1 An area on the floor is designated to keep play materials.
- 2 Storage to keep play materials other than space on the floor is available.

#### PERSONAL CARE AND ROUTINE

12. Meals and Snacks

- 0 Eating times have a strict social atmosphere emphasizing conformity to rules.
- 1 Eating times have neither a strict nor a pleasant social atmosphere.
- 2 During eating times a staff member is with the children and provides a pleasant social atmosphere.

13. Children's Independence in Meals and Snacks

- 0 **Fewer than one third** of children above age 3 feed themselves to complete most of a meal by themselves.
- 1 **One to two thirds** of children above age 3 feed themselves to complete most of a meal or snack by themselves.
- 2 **More than two thirds** of children above age 3 feed themselves to complete most of a meal or snack by themselves.

14. Nap or Rest Time
  - 0 No nap time.
  - 1 Nap time is irregular.
  - 2 Nap time is regular.
  
15. Supervision of Nap or Rest
  - 0 No nap time, or nap time has no supervision.
  - 1 During nap time, supervisor enforces conformity to rigid rules.
  - 2 There is nap time, and supervision is flexible. Children are free to talk quietly or get up and move around when they want, but sleeping children are not disturbed.
  
16. Children's Independence in Toileting
  - 0 **Fewer than one third** of the children above age 3 do toileting without assistance.
  - 1 **One to two thirds** of the children above age 3 do toileting without assistance.
  - 2 **More than two thirds** of the children above age 3 do toileting without assistance.
  
17. Personal Grooming
  - 0 No teacher attention to grooming (hair combed, nails cut, clothes in order).
  - 1 No routine attention to grooming, but worst cases get attention.
  - 2 Routine checking of grooming reaches all children.
  
18. Handwashing
  - 0 Children do not wash hands after toileting or before meals.
  - 1 Children wash hands at one of these times.
  - 2 Children wash hands at both of these times.
  
19. Schedule (If necessary, ask to see time table toward the end of the second day.)
  - 0 Teacher appears not to follow a preplanned schedule or the **schedule is ignored**.  
Routine care (eating, sleeping, toileting) takes up most of the day.
  - 1 Schedule exists, but is **followed too rigidly**.
  - 2 Schedule is planned and is followed with **some flexibility**  
– neither too rigid nor too flexible.

PHYSICAL LEARNING AIDS (These items cover **availability** of aids, not actual use, except 24.)

20. Equipment Available for Gross Motor Learning Activities (Do **not** code actual use.)
  - 0 No gross motor learning equipment is available at the centre.
  - 1 Gross motor learning equipment is available, but number is limited, so **only half or fewer** of the children could use during one day.
  - 2 Gross motor learning equipment is available in sufficient supply, so it is possible that **more than half** of the children **could** use during a day.
  
21. Fine Motor Learning Equipment or Supplies Available for Use by Children
  - 0 No fine motor learning equipment or supplies are available at the centre.
  - 1 Fine motor learning equipment or supplies are available, but number is limited so **only half or fewer** of the children could use during one day.
  - 2 Fine motor learning equipment or supplies are available in sufficient supply so it is possible that **more than half** of the children could use during a day.
  
22. Variety of Equipment/Supplies Available for Fine Motor Learning Activities. Circle the **number** available.
 

0	1	2	3	4	5	6 or more
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23. Availability of Materials on Concepts
- 0 No materials/books are available to introduce and encourage use of concepts like size, shapes, colours.
  - 1 Materials/books on concepts are available to learn concepts, but supply is not enough, so it would be possible for **only half or fewer** of the children to use them every day.
  - 2 Materials/books on concepts are enough, so it would be possible for **more than 1/2 children** to use them daily.
24. Interest Areas (area or special corner focused on one topic which children can touch.)
- 0 No interest area exists which children could use.
  - 1 An interest area exists, but is not used by any child during the observed days.
  - 2 One or more children actually use the interest area during the observed days.
25. Child Related Display – Eye Level
- 0 No display which children can understand. In contrast to an interest area, a display is something children can see, but not touch to use.
  - 1 Children can understand display, but it is not easily visible to children.
  - 2 Display which children can understand is easily visible to children.
26. Child Produced Display (Displayed materials must be displayed for at least one day. If necessary, ask when last changed.)
- 0 No child-produced display.
  - 1 Child-produced display has not been changed for over a month.
  - 2 Child-produced display is changed at least once a month.

#### LANGUAGE & REASONING EXPERIENCES

27. Children's Understanding of Language
- 0 **Fewer than one third** of children seem to understand language used by the teacher.
  - 1 **One to two thirds** of children seem to understand language used by the teacher.
  - 2 **More than two thirds** of children seem to understand language used by the teacher.
28. Children's Scheduled Speaking Opportunities – Children speak during scheduled activities (e.g., individual children talk about experiences, show and tell, or interpret pictures). Do **not** include **rote group** speech. Circle the number of scheduled **activities** done daily.
- 0      1      2      3      4      5      6 or more
29. Type of Individual Speaking Opportunities for Children in Classroom
- 0 Children have **few or no** opportunities for speaking individually in the classroom.
  - 1 Children speak lots, but it is **formal or routine**.
  - 2 Children have lots of **natural speaking** opportunities.
30. Informal Use of Language by Staff
- 0 Language outside of planned activities is primarily used by staff to **control children's** behaviour and manage routines.
  - 1 Staff sometimes talks with children in conversation, but children are asked primarily **"Yes/No" or short answer** questions.
  - 2 Staff-child conversations are frequent. Language is used by staff to **exchange information with children** and for **social interaction**. Children are asked "Why, how, what if" questions requiring longer and more complex answers.
31. Informal Use of Language by Children with peers (within classroom situation)
- 0 Children are not permitted to talk with peers outside of formal activities.
  - 1 Children are permitted but discouraged from talking with their peers outside of formal activities.
  - 2 Children talk freely with their peers outside of formal activities.

32. Use of Activities or Materials on Concepts
- 0 No games/activities or materials/books are used to introduce and encourage use of concepts like size, shapes, colours.
  - 1 Games, activities or materials/books are used to introduce and encourage use of concepts, but supply is not enough, so **only half or fewer** of the children actually use them every day.
  - 2 Games/activities or materials/books to introduce and encourage use of concepts are enough, so **more than 1/2 children** actually use them daily.
33. Style of Use of Materials on Concepts
- 0 Materials to introduce and encourage use of concepts are **not used**, or are **used without guidance** by teacher.
  - 1 Materials to introduce and encourage use of concepts are used in routine, rigid ways.
  - 2 Materials to introduce and encourage use of concepts are used with flexible guidance.
34. Style of Teaching Numbers
- 0 No teaching of numbers is done, either verbally or written.
  - 1 Children recite and/or copy numbers without relating to numbers of objects.
  - 2 Counting and/or writing of numbers under 10 is done in relation to seeing or handling the appropriate number of objects.

#### FINE AND GROSS MOTOR ACTIVITIES

35. Perceptual/Fine Motor Activities — Frequency of Use  
Circle the exact number of times developmentally appropriate fine motor/perceptual materials are used daily. Such materials include buttons, large beads, string or heavy thread for threading beads and buttons, clay, water, writing books or slates.
- 0            1            2            3            4            5            6 or more
36. Guidance (fine motor activities)
- 0 Developmentally appropriate fine motor/perceptual materials are **not used daily**.
  - 1 Developmentally appropriate fine motor/perceptual materials are **used daily, but without guidance**.
  - 2 Developmentally appropriate fine motor/perceptual materials are **used daily with guidance**.
37. Children's Use of Materials for Fine Motor Skills
- 0 **No** materials requiring fine motor skills are used by any children.
  - 1 Materials requiring fine motor skills are used by **only half or fewer** of the children.
  - 2 Materials requiring fine motor skills are used by **more than half** the children.
38. Nature of Gross Motor Activities
- 0 **No** opportunity for **gross motor** activities or physical play
  - 1 Teacher or helper organises only **repetitive** kind of **group play** with no variety, and there is no free play.
  - 2 A **variety of gross motor** activities/physical play occur daily, both teacher-organised and free play.
39. Children's Participation in Gross Motor Activities
- 0 **Fewer than one third** of the children engage daily in gross motor activity, for example, jumping, running, climbing, moving arms, legs in large movements.
  - 1 **One to two thirds** of the children daily engage in gross motor activity.
  - 2 **More than two thirds** of the children daily engage in gross motor activity.
40. Supervision of Gross Motor Activities
- 0 No supervision is provided near gross motor area.
  - 1 Supervision provided, but attention to children is minimal (e.g. adults are distant or attention is given to other tasks) or adults are concerned only with safety.
  - 2 Supervision/ guidance are provided near the children and are encouraging and friendly.

## CREATIVE ACTIVITIES

41. Use of Arts and Crafts Materials to be Used by Children  
Arts/crafts materials include slate, slate pencil, coloured chalk, beads, cloth, coloured pencils, clay, feathers, sand tray, match boxes, crayons, black coal, or teacher-improvised art material, like coconut fiber or flower petals. Circle the number of **times** any of these are used daily.
- 0      1      2      3      4      5      6 or more
42. Guidance in Arts and Crafts Activities
- 0 No arts/crafts activities, or they are routine, i.e., children merely repeat what teacher shows or tells them to do.
- 1 Activities are totally unguided. Children are given material (like chalk, black coal, slate pencil, coconut fiber) and are free to do what they choose without guidance.
- 2 Teacher encourages, guides, but does not direct children in topics.
43. Children's Participation in Art and Craft Activities
- 0 Children do **no art or craft activities**.
- 1 Children do art or craft activities, but have **no choice**.
- 2 Children do art or craft activities with **free expression**.
44. Music – Frequency  
Circle the number of **times** singing occurs during daily during observation.
- 0      1      2      3      4      5      6 or more
45. Movement – Type
- 0 No action songs and no clapping during two days of observation.
- 1 Children only clap with some songs, but no other action.
- 2 Children do both actions and clapping with some songs.
46. Children's Participation in Singing or Movement
- 0 **Fewer than one third** of the children sing, clap, or do actions, even if the activity occurs. This score includes if there are no singing or movement activities.
- 1 **One to two thirds** of the children sing, clap or do actions.
- 2 **More than two thirds** of the children sing songs, clap, or do actions.

## SOCIAL DEVELOPMENT

47. Teacher's Greeting on Arrival and/or Departure
- 0 Staff member greets or says goodbye to **fewer than one third** of the children.
- 1 Staff member greets or says goodbye to **one to two thirds** of the children.
- 2 Staff member greets or says goodbye to **more than two thirds** of the children.
48. Social Interaction (Positive or Negative)
- 0 Social interaction is **not permitted** during free play or other activities.
- 1 Social interaction is **permitted, but not encouraged** during free play /other activities.
- 2 Teacher deliberately **encourages** social interaction during free play /other activities.
49. Cooperation and Sharing
- 0 Teacher keeps structure of "free play" and all other activities such that the children have **no opportunity** for spontaneous cooperation, sharing, or helping.
- 1 Teacher allows but is **indifferent** to cooperation, sharing, and helping among children during free play and other activities.
- 2 Teacher **actively promotes** cooperation, sharing, and/or helping during free play and other activities.

50. Spontaneous Leadership and Initiative
- 0 Teacher keeps structure of "free play" and all other activities such that the children have **no opportunity** for leadership or initiative.
  - 1 Teacher permits, but is **indifferent** to leadership and initiative among children during free play and other activities.
  - 2 Teacher **actively promotes** leadership and/or initiative during free play and other activities.
51. Time for Free Play (children may play as they choose)
- 0 Children are permitted to play freely as they like for **less than half an hour** throughout the day.
  - 1 Children play freely as they choose for a **half an hour up to an hour** throughout the day.
  - 2 Children play freely as they choose for **more an hour** throughout the day.
52. Free Play Supervision
- 0 Free play without supervision is permitted only when the teacher is busy otherwise (e.g., entertaining visitors, issuing food items to helper).
  - 1 Children are allowed to play without supervision as they choose.
  - 2 Free play is done with adult supervision.
53. Duration of Inactivity Expected/Requested by Teacher (Any activity is discouraged by teacher even when she is not interacting with children. Do not count nap time as inactivity.)
- 0 Expected/requested inactivity occurs for **one hour or more** each day.
  - 1 Expected/requested inactivity occurs for **half an hour to less than one hour** each day.
  - 2 Expected/requested inactivity occurs for **less than a half an hour** each day.
54. Conflict Resolution by Teacher
- 0 When children quarrel, the teacher does **not bother** to interfere.
  - 1 When children quarrel, the teacher **makes them stop**, but does not try to resolve basic issues.
  - 2 Teacher intervenes when children quarrel and tries to **sort out the issues**.
55. Children's Conflict Resolution
- 0 Children fight without resolution.
  - 1 Children complain to the teacher, but do not fight with each other.
  - 2 Children resolve conflicts on their own.
56. Tone – General impression of what the quality of interaction means to children.
- 0 Unpleasant.
  - 1 Indifferent.
  - 2 Pleasant.

## How to Compute Scores for TECERS

TECERS covers 7 areas or domains of learning environment inputs referred to as components :Infrastructure, Personal Care and Routines, Physical Learning Aids, Language and Reasoning Experiences, Fine and Gross Motor Activities, Creative Activities, and Social Development Activities.

The scores for each of the seven components in TECERS have to be converted to percentages by adding up the observed points in each component and dividing them by the highest total number of points possible for that component. Thus each component's score will be on a comparable scale (0-100) with each other component, even though the number of items varies from component to component.

To compute the score for a component, add the circled scores (ranging from 0 to 2) for all items in that component. For items that have scores from 0 to six, divide that score by 3 before adding to the total. Divide the sum by 2. Again divide by the number of items in that domain. Multiply by 100. This last number is the Component Score.

Each component variable is the sum of scores actually earned divided by the highest potential score for that component, but omitting missing items both for the earned and potential scores. Thus, if an item is missing in a component for a centre, that item has to be dropped, both from the highest possible potential score as well as from the earned score. Therefore, the centre will have a score as a percentage of the potential score possible, as though the item had not existed. For example, if a centre had no score for Q. No. 9, computation of the score for the component Infrastructure will involve division by 18, not 20.

To get a total TECERS score, add all component scores and divide by 7 (the number of components). All component scores and the final TECERS score must not fall outside the range of 0 to 100.

Here is an example of how to compute the component score for Fine and Gross Motor Activities.

In this example, the scores are as follows :

Item 35 4 is circled.

Item 36 1 is circled.

Item 37 1 is circled.

Item 38 1 is circled.

Item 39 1 is circled.

Item 40 1 is circled.

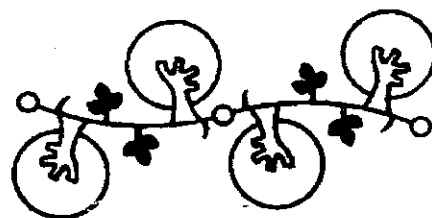
Divide 4 by 3 (1.33). Add  $1.33 + 1 + 1 + 1 + 1 + 1 = 6.33$

Divide 6.33 by 2 = 3.165

Divide 3.165 by 6 (number of items in this domain) = .528

Multiply by 100 and = 52.8 is the score for Fine and Gross Motor Activities.

Now do the same for each of the domains. Then work out the TECERS score by adding all the seven component scores, dividing by 7, and multiplying by 100.



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