

Acta Didactica Napocensia

Volume 14, Number 1, 2021 – DOI: 10.24193/adn.14.1.18

# THE "TRAFFIC LIGHT" METHOD IN THE CONTEXT EVALUATION – SELF-EVALUATION OF PRESCHOOLERS<sup>1</sup>

Abstract: This article focuses on the results of an investigation about the "traffic light" method in kindergarten, which is used as a self-assessment method, a strategy by which the preschoolers evaluate their own progress in achieving the learning objectives, and the teacher obtains an immediate feedback regarding the level of understanding of the preschoolers during the activity. Formative assessment is the most effective because it comes from the learner's own initiative, developing its self-assessment capabilities. Self-assessment is not only a challenge for children, the teacher is also committed to the spirit of evaluation that develops and promotes children's autonomy, knowing not only what the child has to learn in the classroom, but also his own level of knowledge that he has.

Key words: preschool, evaluation, self-assessment, traffic-light

#### **1. Introduction**

Preschool is the period in children's lives when transformations, spectacular evolutions and accumulations take place in all aspects of their development. The central goal of preschool education is the holistic development of children, using a multidisciplinary approach that provides the basis for an independent and creative personality. One of the principles pursued by the Curriculum for Early Education is that of individualization, which implies that "the organization of activities to take into account the child's own pace of development, ensuring children's freedom to choose activities and tasks according to their needs" (2019, p. 5). Children's self-assessment is the "key element" (Andrade & Valtcheva, 2009, p. 12) which complements this principle, giving both parents and teachers the opportunity to see what are their strengths in learning, but also the skills that need to be improved.

#### 2. Theoretical approach to the problem

#### **2.1. Evaluation, complex process**

Evaluation is a very important dimension of the educational process because it provides information about its quality and functionality, "is a process through which teachers and students gather, interpret, and use evidence of student learning" (Andrade & Brookhart, 2019, p. 2). According to Cucoş, it is "a way of improvement … an act integrated into the pedagogical activity" (2014, p. 420), using specific tools in the analysis of children's progress individually, but also in groups, appreciates the degree of achievement of the planned objectives and is an important component that allows decisions to be made both to improve, regulate and systematize the instructive-educational activity.

#### 2.2. Self-assessment, a key element in formative assessment

The heart of the triad teaching - learning - assessment, self-assessment is not just a sequence that concludes a teaching activity, but is a starting point in a dynamic (Opriş, 2011, p. 153) which trains children to reflect on the quality of their work, develops their motivation and perseverance, helps them

<sup>&</sup>lt;sup>1</sup> This paper was presented at the TDID Doctoral Students' Conference, 14-16 May 2020.

Received September 2020. Published online 17 July 2021.

**Cite as:** Stan, L. (2021). The "traffic-light" method in context evaluation – self-evaluation of preschoolers. *Acta Didactica Napocensia*, 14(1), 208-213, https://doi.org/10.24193/adn.14.1.18

understand how to learn better, but also asks for help when they need it (Andrade, 2009, p. 13). It is not done by simply adding a few assessment exercises to existing teaching, but by engaging them in their own learning (Black, Harrison, Lee, Marshal, & William, 2003, p.7).

There are many types of self-assessment, from simple and holistic techniques to complex and multidimensional analysis. Among the simple techniques, we mention the autonotation of one's own work by assigning smiley faces or stars, self-correction (according to certain criteria), traffic light, thumbs up / thumbs down, but also complex ones such as checklists (checklists), rubrics structured, reflective diary, concept map, triangles, scale, PMI diagram (plus, minus, interesting).

#### 2.3. "Traffic light" - a method of self-assessment of preschoolers

The "traffic light" involves the use of colored codes to determine the level of confidence given to your work (Earle, Asbury, McGrogan, McKay, & Salter, 2019, p.37). In kindergarten, it is used as a method of self-assessment, a strategy by which preschoolers assess their own progress in achieving learning objectives, and the teacher obtains immediate feedback on the level of understanding of preschoolers during the activity. We must always start by asking children to identify those elements that they consider "green", an essential step through which they develop their spirit of observation, ability to analyze, justify and argue in a positive context (McCormick & Harvey, 2018, p. 13).

In order to do this, it is important to know the work tasks, objectives and success criteria according to which the evaluation will be made and, most importantly, the children must be objective, especially when it comes to their own work (Opriş, 2011, p. 153). This is not done suddenly but gradually, the self-assessment approach of the preschooler including at the level of internal factors, two categories of components, one affective, motivational and one estimative. In order for the preschooler to improve his learning through the process of self-evaluation, he must become the author of his own training through a transfer of authority, control and responsibility from the teacher (Dulamă, 2005, p. 91).

In order to better understand this strategy, a large traffic light can be made with the children, and next to the colors it will be written what each one means. Green means "I know, I can do it myself", yellow means "I'm not sure, I have a question", and red means "I don't understand, I need help". The children each use three cards, differently colored, which allow them to communicate with the educator without raising their hand. Depending on the task received, the preschooler places on top of the card that represents his level of understanding, so the teacher knows which children can continue working independently and who need help.

Another way of using the traffic light by preschoolers is the colored stickers, which can be used to mark the level of confidence, being a truly effective self-assessment tool (White & White, 2018, p. 2). Children have access to these polka dots that they can use whenever they need. If some tasks are not understood and receive a yellow or red dot, you can talk to the children in question to see what they did not understand and why. Once they understand and solve the tasks correctly, they can stick the green dot. The introduction of works in traffic light trays is also a simple way of communication between the teacher and the children. All they have to do is place their work in one of the colored trays, depending on their understanding of the task. This is extremely useful for the teacher because he can focus his attention for the beginning on those children who need more explanations in solving tasks.

The "traffic light" can also be used to manage the behavior of preschoolers in the classroom. Every morning, the children present start from the color green, which means that it is an appropriate behavior. Depending on their behavior during the day, children may change to yellow, which means "warning", when something in the behavior is not appropriate and it's time to calm down, or even red, which means "stop" and they should stop and think because this behavior is not accepted. Both children who have reached the color yellow and those who have reached the color red must find the solution to return to the green, to be aware of what they have done wrong in their behavior and to correct their mistake.

#### 3. Research methodology

#### 3.1. Research task

A task of the research was to identify the views of teachers in relation to the use of "traffic light" as a method of self-assessment of preschoolers in the instructional-educational process carried out in the group.

#### 3.2. Research instrument

The investigated population received a questionnaire in online format, between May and June 2020 and was addressed to teachers in preschool education, both in urban and rural areas. The questionnaire had 23 items and was structured in three parts. The first part focused on the demographic data of the respondents (9 items), the second part aimed collecting data on various aspects involved in the selfassessment of preschoolers (10 items), and the third part referred to moral education conducted both in the family as well as in the kindergarten (4 items). The questions used were open, closed and mixed. 5 open-ended questions asked teachers about the characterization of the group from a moral point of view, about how it integrates self-assessment in activities and the level of difficulty in using it in the group, parental support in forming moral skills and attitudes in children, but also what they want to learn from self-assessment training courses for preschoolers. 4 questions out of the 18 closed were dichotomous questions, regarding gender, environment, use of self-assessment methods, but also participation in training courses on this topic. 10 semi-open questions collected identification data of the teachers participating in this study, information on the use of self-assessment methods and the percentage during a teaching activity, given to the self-assessment of preschoolers. Also in the category of closed questions were the 4 semantic questions in scale, which followed the frequency of using self-assessment methods. the conditions necessary for self-assessment, its contribution to shaping the moral behavior of preschoolers and the share of institutions involved in children's moral education.

#### 3.3. Participants

The sample consisted of 122 teachers who participated voluntarily in this study, aged between 18 and 64 years, 121 females (99.2%) and only 1 male (0.1%), distributed in the following age groups: 18-29 years (13.2% respondents), 30-39 years (33.6% respondents), 40-49 years (32.8% respondents), 50-59 years (16.4 respondents), over 60 years the rest of the respondents (4.1%). Out of the total number of teachers, 64% have a first degree, 13.9% have a second degree, 21% have passed the teacher confirmation exam (In Romania there are exams on which teachers can achieve a higher qualification level. The first exam is the teacher confirmation exam, which is compulsory. The next exams, second degree and first degree, are optional.) 100 respondents (81.96%) from urban areas and 22 respondents (18.04) from rural areas.

#### 4. Results

The obtained data was quantitatively analyzed using SPSS statistical processing program.

In the questionnaire teachers were asked what self-assessment methods they use and how often they use them in their activities. The answers are presented in Table 1.

Self-	Frequency	Percent How often do you use these self-assessment methods						Total
assessment methods			1-2 times a month	1-2 times a week	Almost daily	Rarely	As many times as needed	
self-correcting	19	15.6	1	2	4	0	12	19
Self-scoring	58	47.5	1	4	8	1	44	58

**Table 1.** Self-assessment methods used in the activity and their frequency

checklist	5	4.1	0	0	2	0	3	5
the reflective diary	14	11.5	1	2	3	0	8	14
traffic-light	26	21.3	1	1	4	0	20	26
Total	122	100	4	9	21	1	87	122

The data obtained in the study showed that "self-scoring" using "smiley faces" or "stars" is the most used method of self-assessment of preschoolers by educators. However, 21.3% of respondents use the "traffic light" in their daily activities in kindergarten whenever needed, because it is a simple and quick strategy to get feedback from children and give them directions where needed. The materials for this method are easy to make, but also simple to use by preschoolers.

The "traffic light" can also be used before starting a thematic project. There is a discussion with the children about the aspects they want to be transmitted in the respective project. The educator asks certain questions related to the chosen topic, and they show interest or disinterest, showing a color of the traffic light with which they are in agreement at that time, giving the teacher the opportunity to choose only those activities that bring news in the children's field of knowledge.

Being a color-focused method, the "traffic light" can be used for all groups of children in kindergarten, even for the youngest group in a simplified form. Using the color card system can reduce children's anxiety by just showing the educator the color that matches their level of understanding. 53.85% of educators applied it to the oldest group, 19.23% to the middle group, 15.39% to the youngest group and 11.53% to the mixed group

Table 2 shows that the educators who use the "traffic light" method have quite large groups, between 26 and 30 children.

	-			-					
Number of children in the group	Self-assessment methods								
	self- correcting	Self-scoring	checklist	the reflective diary	traffic-light	Total			
between 16 and 20 children	2	6	0	4	3	15			
between 21 and 25 children	8	16	2	2	6	34			
between 26 and 30 children	6	22	2	4	10	44			
between 31 and 35 children	2	10	1	2	6	21			
under 15 children	1	4	0	2	1	8			
Total	19	58	5	14	26	122			

Table 2. Self-assessment methods used in relation to the number of children in the group

*In teaching activities*, the immediate response from the teacher encourages the children to reveal their problems. They realize where they need help and thus, they can improve their own learning through self-assessment, and through knowledge sharing and cooperation they help their colleagues. When you present them with a new theme, see if they understand by the color of the cards in front of them. If a

child chooses the yellow or red card, they can be given the necessary explanations, so the teacher makes sure that the whole class understands the information transmitted.

In the fixing activities, the children can be grouped according to the chosen color, and the indications are given to the whole group at once. You can also send those who have the green card to help those with the yellow card, while you will work with those who have the red card. *Before the assessment activities*, it is possible to work with a smaller group of children to be better observed and to make them understand where they still have to work. This method cultivates children's motivation towards learning and a responsible attitude towards their own activity.

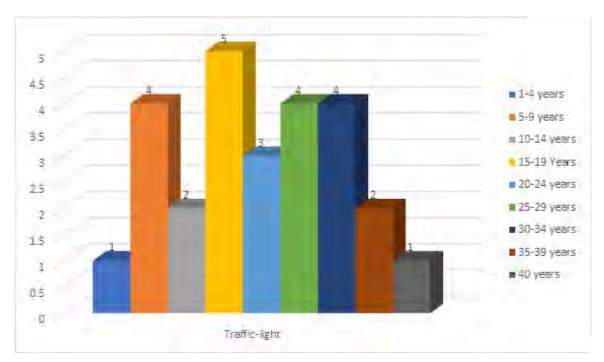


Figure 1. Use of "traffic light" according to seniority in education

As Figure 1 shows, regardless of seniority, teachers use the "traffic light" method in their activities. Preschoolers can acquire the ability to make decisions, to make informed choices only under the guidance of the teacher. The distinctive signs used in this method serve as a simple means of communicating the assessment of the preschooler, who may later be asked to motivate his choice (Black, Harrison, Lee, Marshall & Wiliam, 2002, p.11).

# 3. Conclusion

Assessment is a complex process that provides the teacher with information about the child's preparation by analogy with the requirements of the school curriculum, and for the child it is the means by which he realizes how he is seen and understood by the teacher and how he appreciates the training. "By informing them of the assessment criteria to be used, the teacher will stimulate motivation and develop students' self-assessment skills" (Oprea, 2009, p. 241). In order to achieve self-assessment, children, especially preschoolers, need guidance from the teacher, conducting transparent assessments in which they are explained (in their understanding) the criteria they must meet, by training in assessing their own performance and own results.

The benefits of self-assessment are multiple, both for children and teachers, preschoolers becoming much more independent in their own learning, but also more motivated to discover new things, being able to freely express what they know without fear of being criticized, being able to establish where they are at the moment and what are the next steps in learning. For teachers it is a challenge, carrying out activities involving children actively in their development and transferring some of their responsibilities.

The implications of didactic self-evaluation on the preschooler are manifested with priority at the level of his self-concept, the main source of information consisting in the permanent reporting to what the teacher does and how he performs the evaluation in the classroom. The role of young people is changing, they are no longer mere spectators, but experience much more autonomy, they become more actively involved in everything related to their own learning.

# References

Andrade, H., & Brookhart, S. (2019). Classroom assessment as the co-regulation of learning. *Assessment in Education: Principles, Policy & Practice*. doi: 10.1080/0969594X.2019.1571992

Andrade, H., & Valtcheva, A. (2009). Promoting learning and achievement through self-assessment. *Theory Into Practice*, 48(1), 12-19.

Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2002). *Working Inside the Black Box:* Assessment for Learning in the Classroom. Phi Delta Kappan, 86(1), 8-21.

Cerghit, I. (2008). Sisteme de instruire alternative și complementare. Structuri, stiluri și strategii. [Alternative and complementary training systems. Structures, styles and strategies]. București: Polirom

Dulamă, M.E. (2005). Tehnici de autoevaluare și interevaluare. [Self-assessment and inter-assessment techniques]. *Didactica Pro ..., 5-6 (33-34),* 90-97.

Earle, S., Asbury, E., McGrogan, N., McKay, D., & Salter, L. (2019). Assessment in the Primary Classroom: Principles and practice.

McCormick, M. & Harvey, Chris. (2018). The traffic lights toolkit, Canterbury Christ Church University.

MEN, (2019). Curriculum pentru educația timpurie. [Curriculum for early education].

Oprea, C.L. (2009). *Strategii didactice interactive. Repere teoretice și practice. (ediția a IV-a).* [Interactive teaching strategies - theoretical and practical landmarks. Theoretical and practical landmarks (4th ed.)]. București: Editura Didactică și Pedagogică.

Opriș, M. (2011). *Religie, morală, educație. Perspective teologice și pedagogice.* [Religion, morality, education. Theological and pedagogical perspectives]. București: Editura Basilica a Patriarhiei Române.

Opriș, M. & Opriș, D. (2013). *Cercetare și religie. Repere și demersuri comune*. [Research and religion. Common landmarks and approaches]. Cluj-Napoca: Editura Eikon.

White, A.R., & White, P. (2018). Using traffic light cards in an English language classroom. On researchgate, this information is also present: Conference: CreTech 2018 6th International Conference on Creative Technology 24th – 26th July

# Author

**STAN Loredana-Alina,** Babeş - Bolyai University, Cluj - Napoca (România). E-mail: stan\_loredana2005@yahoo.com