

# **The relevance of role-playing in environmental education**

## **Intérêt des jeux de rôle en éducation relative à l'environnement**

### **(E.R.E.)**

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#### SUMMARY

We created different role-plays and we then analysed them in light of certain values that 8 to 10 year-old children are able to distinguish.

Our hypothesis is that the role-plays do have an impact. They facilitate the emergence of values, because they promote communication with regard to such values as: solicitude, aestheticism, solidarity, tolerance, responsibility and autonomy.

The method which we adopted consists of a written questionnaire (pre-test), designed to tell us the choices the pupils made among the different values and how they arrived at those choices. The post-test then shows how these choices developed and thus demonstrates the influence of the role-plays. The children's reasoning is brought out in a recorded discussion.

The analysis of the results, with the aid of a checklist of relevant indicators for each of the values, identifies the limitations of role-plays, the place they may have in a project, and the necessity of adequate training for the teachers in charge of the discussions about ERE.

KEY WORDS : – role-play – values – primary school

#### RESUME

Nous avons créé différents jeux de rôle et nous les avons analysés par rapport à des valeurs que des enfants de 8 – 10 ans sont aptes à clarifier.

Notre hypothèse est que ces jeux de rôle ont un impact ; ils facilitent l'émergence de valeurs car ils représentent les aides à la communication pour se positionner par rapport aux valeurs telles que : la sollicitude, l'esthétisme, la solidarité, la tolérance, la responsabilité, l'autonomie.

La méthodologie adoptée, réside dans un questionnaire écrit (prétest) pour connaître les choix justifiés des élèves parmi différentes valeurs. Le post-test ensuite montre l'évolution de ces choix chez les enfants, l'intérêt des jeux de rôle, et est suivi d'une discussion enregistrée qui met en lumière leur argumentation.

L'analyse des résultats au moyen d'une grille d'indicateurs pertinents pour chacune des valeurs, porte sur les limites des jeux de rôle, leur place dans une pédagogie de projet et la nécessité d'une formation pour les enseignants qui organisent des débats en ERE.

MOTS CLEFS : – jeu de rôle – valeurs – école primaire

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*Introduction*

Among the principal questions related to the content of EE is that of the treatment of environmental values during the educational process. In France, among the different teaching strategies (from Caduto 1985-UNESCO), the most frequently used in EE are: *laissez faire*, inculcation, behaviour modification, action learning (school or community involvement with a real life experience). We, however, favoured another strategy, namely “values clarification,” because it is based on a free choice among values. In doing so, it develops the whole personality, stimulating the affective and logical capacities of the child and addressing the key values of autonomous thinking and responsibility.

To facilitate the debate on values we created some learning tools such as role-plays. In the following, we show the impact of one of them which concerns rubbish in a school and paper recycling. First we will introduce the EE key values and the set of indicators that enabled us to detect them. Then we will describe our methodology and finally, our results.

**1. The “STAR” values (Goffin L, Boniver M, 1982)**

Four values are described as essential in the French literature on EE : Solidarity, Tolerance, Autonomy and Responsibility, but we shall add two more: solicitude and aestheticism.

Individual values	Social values	Daily values ( the Surroundings)
<ul style="list-style-type: none"> <li>• Autonomy</li> </ul>	<ul style="list-style-type: none"> <li>• Responsibility (to say and to act) Synchronic (in space) Diachronic (in time)</li> <li>• Solidarity</li> <li>• Cooperation For an equitable sharing of natural resources</li> <li>• Tolerance in the debate</li> <li>• Solicitude towards present and future generations to preserve natural resources</li> </ul> <p>locally            on a short term globally            and on a long term</p>	<ul style="list-style-type: none"> <li>• Aestheticism</li> <li>Well-being ; Comfort</li> <li>Harmony</li> </ul>

The above values are not new as applied to human beings. But it is new to apply them to the whole of Nature (minerals, animals and plants). Responsibility is the number one value (“Responsibility Principle” - Hans Jonas 1993). It concerns the present and the long term future (millions of years for the nuclear wastes) and the whole world. So the question is how to make children conscious of these different values. This is why, among the different strategies in EE analysed by L. Sauvé (1994), we have chosen that of “values clarification.”

**2. “Values clarification” (Rath - Harmin - Simon 1978)**

According to the authors, this strategy has four steps, which can be summarized as follows:

- identification of values and their hierarchy;
- free choice of values after thoughtful consideration of the consequences of each alternative;
- affirmation: a willingness to express one’s choice publicly;
- action in accordance with the chosen values.

To facilitate the debate about the clarification of values, we created a role-play concerning paper recycling. Its objectives were :

- to think about one's own behaviour concerning waste;
- to try to convince pupils to stop dirtying the school;
- to motivate pupils to start a community project of paper recycling;
- to listen to each other when debating;
- to clarify values.

This role-play worked with conflicts of values:

- aestheticism, solidarity, responsibility (throwing waste in the dustbin and paper in the recycling bin ) as opposed to carelessness, indifference, neglect, nonchalance, inaction in deference to personal comfort, selfishness...
- family values as opposed to school values regarding paper recycling;
- environmental values as opposed to economic values (including job preservation, profitability, forest management)
- environmental values as opposed to financial values (recycled paper is more expensive than other paper).

The arguments of the protagonists were written by the children themselves and completed by us. The different roles are : the ecologist, the indifferent person, the socially aware person, the selfish person, the class delegate, the animator and the prompter. This game was played at the beginning of a community project, but it could just as well have been played in the middle or at the end of a project.

Our *hypothesis* is: Role-play will help children to debate and clarify not only "key" values, but also other values. To be able to demonstrate that children are able to identify values, we determined precise criteria for each of the key values.

### **3. Criteria and indicators for the key values in EE**

#### **3.1. Solicitude : to care for (from emotion to action)**

As children are unable to write precisely, we consider them to mean solicitude when they describe :

- being preoccupied with, as opposed to being insensitive to pollution and the preservation of Nature
- giving one's attention to, as opposed to being indifferent to or unaffected by Nature
- caring for, as opposed to not being concerned by, taking no interest in Nature
- attending to, as opposed to not doing anything about Nature (cf. criterion for Responsibility).

#### **3.2. Aestheticism**

- beauty vs. ugliness
- harmonious surroundings, order vs. disorder
- positive description of a landscape : pleasant, agreeable, attractive, clean, etc.; attractiveness; good feeling when seeing a landscape vs. dirtiness, discomfort, uneasy feeling, indisposition, disgust, feeling of repulsion .

#### **3.3. Solidarity**

We shall not develop the different criteria in these paper, but we shall consider that when children identify with a socially aware character or use appropriate phrases, they are conscious of the values involved.

### 3.4. Tolerance

MF Daniel ( P. Laurendeau 1996) influenced our selection of criteria to apply when children are debating:

- Do they accept comments easily.
- Are they able to listen carefully.
- Are they able to recapitulate others' points of view.
- Are they open minded, do they accept new ideas.

### 3.5. Autonomy

We defined eight criteria for autonomous thinking, based on the research of INRP (1978) and the works of Lipman (1995 and 1996):

1. easy expression of own ideas:
  - speaking with confidence
  - controlling timidity
2. constructing own opinions from others' ideas
  - writing and justifying them
3. capacity for critical thinking
4. ability to ask questions (curiosity)
5. desire to improve own knowledge and to seek information
6. personal ability to make decisions ( without inculcation )
7. personal capacity for auto-evaluation (analysis of causes of failure and success)
8. ability to act by oneself.

This last indicator matches responsibility as well.

### 3.6. Responsibility

Behaviour is classically measured on a gradual scale:

I do it (e.g. save water, electricity, recycle glass) : very often, often, sometimes, rarely, never.  
And WHY ? (justification)

Our methodology consists of a pre-test before the game and a post-test after the debate.

## 4. Methodology:

A check list was adopted, after we realised that open questions tend to lead to simple answers or none at all, since it is easier for children to speak than to write. I would have preferred to record each pupil's oral open responses, because it lessens the degree of inculcation, but this process is time-consuming and the results are more difficult to analyse and evaluate.

In the checklist, there are one or two items for each indicator.

E.g. for controlling timidity (autonomous thinking)

I controlled my timidity

I debated easily

other feeling :

The role-play (briefing) and the following debate (debriefing) were recorded.

The impact of the role-play was tested with the same questions before and after the debates: Do you agree with a "clean school project" ? and why ? Which participant do you agree with ? Did you change or not your mind thanks to the debate ? Why ?

The game was tested in two classes (10-12 olds) in Cergy near Paris :

- one in a difficult area with delinquency (CM1) : 23 pupils

- one in a middle class area (CM2): 20 pupils
- yielding a total of 10-12 year-olds: 43 pupils

## 5. Results

### 5.1. Evolution of the attitudes - influence of the role-play (recycling paper)

Two pupils( 5%) still write that they do not agree with the project after the game, and two others (maybe five = 22%) mentioned they had changed their mind: having had no clear idea at the beginning of the game, they finally agree with the project. At the end, 74 % of children approve the project and 21% are still hesitant (no clear response).

So even if the debate lasted a short time, it is possible that the game had a little influence, but what is more important is to let children discuss democratically.

### 5.2. Which participant do you agree with ? Solidarity

40% of the children identified with the delegate and the animator who is in favour of the project, because “he said important things.” 17% agreed with the ecologist, 22% with the prompter and 4% with the person who defended solidarity. Thus, **87% of the pupils defended environmental values**, none were opposed to the defense of environment, and 13% had no clear response.

We were surprised by several things :

That the advocate for solidarity was not chosen frequently (4%).

Most of them explained that they did not want to pollute (aesthetic considerations principally mentioned), but some did not agree with picking up other people’s rubbish. Some pupils pointed to the importance of setting a good example.

Some others considered it discouraging to clean a school-yard, a sports field or river-bank for others over a long period, because it is not educative, since these people don’t change their attitude. So they only agreed with doing it for a short time. One child admitted frankly that he would drop the paper on the ground if the dustbin were too far (showing no responsibility in his actions).

We might also mention that one girl who chose a role opposed to environmental protection was influenced by arguments and became indecisive. So she asked to play again in a positive role. This risk of identification with fiction has already been described by sociologists. It demonstrates the importance of the post-debate (for objectification).

### 5.3. Tolerance : listening to others – accepting comments easily

20% of pupils checked the item “ I was indisposed by those who played the role angrily, aggressively.”.

27% of participants complained about the lack of attention of pupils : “Some pupils did not listen to me.”.

### 5.4. Autonomous mind

**To be able to discuss easily** : to be able to speak with confidence, controlling timidity.

What did you feel when playing a role?	% according to the number of players
1) I was afraid to speak	35 %
2) I had difficulty finding appropriate arguments	43 %
3) I was influenced by counter arguments	13 %
4) I controlled my timidity	38 %
5) I felt confident in discussing, in debating	35 %
6) I had fun	53 %

When pupils played the same game twice, they improved their confidence in speaking and debating. So children had to learn how to debate. First, in one of the two classes, they learned how to write arguments during the French lesson and afterwards, they learned how to organise a debate autonomously. We realised teachers had also to be prepared accordingly.

**Being able to ask questions, construct own opinions from others' ideas, make decisions.**

Learning, thanks to the debate	% of the responses
To question myself	37%
To think	62 %
To make choices	25%
To debate (appropriate arguments)	50 %

The results show that a few children (25%) reached the point of being able to make a choice immediately after the game. That goal was reached only at the end of the final debate. They said : we learned “to have new ideas,” “not to be afraid,” “not to fear,” “some children can’t speak in front of spectators, so that improves speech.”

**Conclusion**

Most children involved in the role-play defended environment values. Children who did not agree with them, had the opportunity to justify their point of view.

The values which were clarified are : Aestheticism, Solidarity, Responsibility. But Tolerance and Autonomy were addressed only implicitly.

As L. Renaud and L. Sauvé say (1990), such games facilitate the expression of opinions, improvisation, listening and “decentration,” allowing children to understand others points of view, they help to develop Tolerance; they also oblige children to make decisions, so they lead to autonomous thinking.

In the end, “ Values Clarification ” is really composed of different steps. First, the children have to express, what they consider as values, using their own experience. Secondly, the values are defined, analysed and eventually classified. Thirdly, they must be justified objectively : logically and scientifically. And finally, these values must lead to action. That is what happened in the two classes: as a result of a complete community project with a real life experience coupled with values clarification, the children started recycling paper.

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the roles of the game "clean school"	number of responses	why? examples of responses
- the delegate and animator (in favour of the project)	40%	"The delegate presented the debate well." "He played his role well." "He said important things."
- the ecologist	17%	"He played the same role as me."
- the prompter	22%	"He speaks a lot."
- person defending solidarity	04%	"He defended the environment well."
- any person defending environment	04%	"I want to respect Nature."
- 0 response or not clear response	13%	
participants opposed to defense of the environment	0%	

Remark : 2 children wrote 2 responses

	for the project		against project		unclear or no response	
	CM1	CM2	CM1	CM2	CM1	CM2
before the game	12		1		10?	
after the game	17	15	0	2	6	3
change of attitude	+5 = 22%		-1		4	
total (43)	32=74%		2=5%		6=21%	

change of opinion game "clean school"	yes	no	no response
CM1 (23 pupils) - written question	1	12	10
CM2 (20 pupils) - written question - oral questions	1 2 or 3	17	5