

# **Promoting children's capacities for active and deliberative citizenship with the help of digital technologies.**

## **The experience of CADE Project in Costa Rica**

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### **Biographical Sketches:**

Clotilde Fonseca is Costa Rica's Minister of Science and Technology. She is a Founding Director of the Costa Rican Program of Educational Informatics created in 1988 in Costa Rica by the Omar Dengo Foundation and the Ministry of Public Education, a program that has reached over one and half million children and teachers during its more than two decades of work. She has been Executive Director of the Omar Dengo Foundation from its founding in 1987 to 1994 and from 1996 to 2010.

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### **Abstract**

This paper explains several core aspects of the experience of the Omar Dengo Foundation of Costa Rica in the development of the CADE Project, a set of citizenship education programs based on the conception of the children as citizens and on a particular conception of the role of digital technologies in the promotion the capacities of children. It analyzes the outcomes of the program designed for elementary schools and presents the lessons learned in the process of scaling up the initiative from its inception as a pilot to its implementation as a regular after-school program within the Costa Rican National Program of Educational Informatics.

### **Keywords**

Citizenship education, children participation rights, information and communication technologies, self-efficacy, after-school programs

## **1. Introduction**

The *Deliberative Capabilities in School Age Children* project (from now on CADE, its Spanish acronym) emerged in 2001 as a research and development initiative of the Omar Dengo Foundation (ODF) in order to 1) conceptually explore and operationalize the deliberative capabilities by linking them to the exercise of children's participation rights; 2) develop an educational methodology that can promote these skills; and 3) explore the contributions of digital technologies to the development of these capabilities.

The result of these efforts has been the creation of a set of citizenship education programs for children and youth, focused on the development of self-efficacy and deliberative capabilities, and mediated by the use of digital technologies. These programs have been implemented in Costa Rica and other Central American countries.

In Costa Rica, CADE is being implemented in schools that take part in the National Program of Educational Informatics, a joint initiative carried out by ODF and the Ministry of Public Education (MPE). From 2004 to date, the project has been executed in 24 schools and 2 high schools across the country and has benefited nearly 950 children. It is conceived as an afterschool program in charge of the computer lab teacher, over 4 hours per week from February to November.

Throughout this time, CADE has extended its area of influence. It has definitively permeated the proposal of the National Program of Educational Informatics related to the use of digital technologies to promote citizenship skills. Moreover, with support from the United Nations Democracy Fund, the *Democracy Builders: youth capacities for active citizenship and personal fulfillment* project aimed at enriching the official high school curriculum of civic education with CADE's methodology was launched in 2007<sup>1</sup>.

This paper has two main purposes. First, to show how a curriculum was articulated to promote children's participation rights intertwined with the innovative use of digital technologies. Second, to examine some characteristics of the learning outcomes obtained by the children who have participated in CADE's program for elementary schools. The paper concludes with three major lessons learned in the process of scaling up the initiative from its inception as a pilot to its implementation as a regular after-school program.

## **2. Two founding premises**

CADE's conception of citizenship education is based on two pillars. First, the recognition of children's participation rights and the need to help them develop the skills required to exercise them in the context of a participatory and deliberative democracy. Second, the conviction that today digital technologies can not be absent in citizenship education proposals.

### ***Children as citizens***

The first premise on which CADE was built is that the changes brought about by the Convention on the Rights of the Child in the conception of children and their rights, force to rethink the basis and justification of citizenship education. This can no longer be exclusively conceived as the preparation of our children and youth to assume future political and civic responsibilities, but rather as a process that partly consists of facilitating the enactment of the participation rights that children and adolescents already have in the present (Bujanda, 2007; Omar Dengo Foundation, 2010).

The CADE approach to citizenship education has been strongly influenced by the extensive and insightful work done by Earls and Carlson to promote the conception of children as citizens as well as their capacities to participate in the framework of a deliberative democracy (Carlson & Earls, 2001; Earls & Carlson, 2002). Based on Sen's human capability approach (Sen, 1992, 1999), these authors advocate the need to promote children's emerging participative capabilities and to create opportunities for them to be perceived as agents of change capable of actively contributing to their wellbeing and that of their communities.

They have successfully applied their theory in significant research projects on child mental health in extreme contexts such as the HIV/AIDS pandemic in Tanzania (Earls, Raviola & Carlson, 2008; Kamo, Carlson, Brennan & Earls, 2008). In Costa Rica, they encouraged the launching of CADE as a way to test the outreach that their approach could have in a country acknowledged to have a sustained record of promoting children and their capacities (Carlson, Earls & Fonseca, 2001). Their collaboration was decisive in order for the project to lay a solid theoretical and research basis. From these bases, the ODF team designed and validated a curriculum that took advantage of their experience in innovative school settings and their particular vision of digital technologies as tools for high order skills development.

### ***Digital technologies as drivers for citizen competence***

The second premise on which CADE rests has to do with the value of incorporating the digital dimension that citizenship is acquiring in our time. Digital technologies can hardly be dissociated from the way in which citizenship is being experienced in contemporary societies. They are a powerful educational tool as well: they have enriched and expanded the ways in which students can learn, understand the views and positions of others, spread their own ideas and proposals, and join different networks and spaces for communication and dialogue.

Since its inception in 1988, ODF has produced and implemented successful educational programs that use digital technologies in innovative ways to develop capacities related to logical-mathematical thinking, problem solving, innovation, teamwork, communication and social participation (Fonseca, 2005, 2009; Fundación Omar Dengo, 2005, 2006, 2009). At a still early time in the development of learning technologies -even for the developed world-, this organization took on the challenge of massively introducing digital technologies in the educational system in conjunction with Costa Rican MPE. Moreover, ODF's team adopted a radically new approach -at least in our regional context-, about how technology can support learning. They developed a methodology that combined project based learning, the construction and manipulation of digital objects using programming languages, and the use of games as tools for the development of cognitive and digital skills.

CADE's proposal with regard to the use of technologies has tried to benefit from the latter perspectives and resources in order to allow children strengthen their rights and responsibilities as active citizens and better understand the digital dimension of participatory processes and government.

### **3. The curriculum**

In this section the curriculum is presented that was devised in the context of the CADE project, specifically its learning objectives, methodology and the way technology is incorporated in the learning process<sup>ii</sup>.

#### ***The objective: develop children's self-efficacy and deliberative capacities***

CADE claims that children should be able to exercise their rights to participate in the framework of a reflective, ethical and dialogical citizenship, a citizenship characterized by the existence of opportunities for and the capacity to participate in public deliberation.

Deliberation takes shape as a social and political action within the framework of deliberative democracy theories. In a deliberative democracy the legitimacy of political decisions requires giving the same attention to the reasons of all citizens in the process of debate on public issues (Bohman, 1997; Feres, 2000). It represents democratic practices in which citizen participation is not restricted to the act of voting, but also includes taking part in public discussions and social shared actions aimed at improving collective life.

CADE's definition of deliberation is based on the proposals of Earls and Carlson (2001, 2002) – as derived from a synthesis of based on the theories of Sen (1992, 1999), Habermas (1984, 1987) and Bohman (1996, 1997). Burkhalter, Gastil and Kelshaw (2002) and Gastil and Dillard (1999) have further articulated notions of deliberation as a political process. In CADE deliberation is viewed as a cooperative dialogue on public issues in which participants carefully consider the available information, take into account the perspective of others, ensure everyone's equitable participation, and build agreements that integrate different contributions in search of the common good (Fundación Omar Dengo, 2005).

For children to participate effectively in deliberative processes, they need opportunities to be part of them –in equitable terms-, recognizing that a certain threshold of capabilities exists in children as well. Hence the idea of producing a specific curriculum focused on the development of these capacities, and the self-efficacy and sense of agency that will allow the children to assume an active role in their community.

Based on this definition of deliberation and on the 4 deliberation principles or traits with which Carlson and Earls synthesized Habermas' related theory -trust, perspective taking, mutual understanding and social shared action<sup>iii</sup>- (2001, 2002), we formulated 4 broad deliberative competencies that helped us organize the learning content and experiences along the curriculum:

- *Starting or getting engaged in public deliberations.* To participate in democratic processes, children require, first, to feel that they are called to do it. That is, seeing themselves as active members of the community, with valuable contributions to make for their own and others' well-being and whose voice should be taken into account. This is the trust and self-efficacy component.

- *Developing good dialogues.* Good dialogue is at the core of the deliberative encounters. Derived from Habermas' communicative ethics, it means a form of communication in which participants understand that they all share a common goal –trying to reach the best idea or decision-, listen carefully to the ideas of others even if they do not share them, encourage everyone to participate equally, argue and assess ideas critically, try to put themselves in the other to get to understand, and build ideas with input from all.
- *Thoughtful inquiry.* Deliberating means thoughtfully discussing all sides of a question and carefully considering or weighing up all the arguments. In the case of deliberations on public problems, it involves being able to research community problems, critically analyze available information, and build a rigorous and shared understanding of those problems and their possible solutions.
- *Undertaking cooperative and agreed upon action.* In the context of citizenship, deliberation is concerned not only with discussion and dialogue, but also with agreeing on and undertaking the best course of action in a given situation. This will usually require reaching agreements that integrate different perspectives and cooperating with others in order to carry out the plan of action.

These competence framework lead to the formulation of the program's learning outcomes (see Table 1).

**Table 1**

**Expected learning outcomes in CADE**

<b>Dimensions</b>	<b>Children should get to...</b>
<b>Being able of starting/engaging in a public deliberation</b>	<ul style="list-style-type: none"> <li>– See themselves as members of a local, national and global community</li> <li>– Be interested in the needs and problems of their local or national community</li> <li>– Be aware of their rights to participate in the political and civic life, and the responsibilities they can assume</li> <li>– Take the initiative to solve problems that affect them</li> <li>– Develop trust in others</li> </ul>
<b>Being able to develop high quality dialogues</b>	<ul style="list-style-type: none"> <li>– Encourage everybody's participation from a symmetrical position</li> <li>– Accept and value the ideas, beliefs, ways of being or practices of others</li> <li>– Provide reasoned explanations of their opinions using arguments, data, criteria or facts to support that position</li> <li>– Develop perspective taking</li> <li>– Weigh up all arguments, going beyond initial statements to achieve the integration of the ideas (integration of perspectives).</li> </ul>
<b>Being able of thoughtful inquiry</b>	<ul style="list-style-type: none"> <li>– Look for information and assess its usefulness and fiability</li> <li>– Weigh up the information and different points of view involved</li> <li>– Look creatively for possible solutions to problems</li> <li>– Evaluate different alternatives and their consequences</li> </ul>
<b>Being able to undertake cooperative and agreed upon action</b>	<ul style="list-style-type: none"> <li>– Participate with others in order to contribute to solve public problems</li> <li>– Apply agreement-oriented decision-making procedures</li> <li>– Reach agreements that integrate the perspectives of those involved</li> <li>– Cooperate with others</li> <li>– Assume responsibility for the agreements</li> </ul>

***The methodology: five main ingredients***

The devised methodology is a combination of different didactical strategies that have been proved to lead to effective learning and also to be coherent with citizenship education: 1) experiential learning, 2) cooperative learning, 3) thoughtful inquiry, 4) participatory theater, and 5) deliberation as the usual form of dialogue.

These strategies have been explained extensively elsewhere (Fundación Omar Dengo, 2005). Here they are briefly defined:

- *Experiential learning.* The experiential approach to citizenship education (Koopmann, 2002) entails creating learning strategies where children can act as citizens and experience their ability to become citizens. In CADE this action component is structured around a process of investigation and intervention on community problems that affect them: children identify problem areas in their community, select one on which to investigate, devise a solution and carry out an action plan to gain support for their proposal or to put it into practice.
- *Cooperative learning.* Cooperative learning is one of the most useful and relevant approaches in education for active citizenship. Along with experiential learning, it offers a solid basis for effective learning. In CADE special attention is paid to its techniques for making small group work more effective and truly collaborative (Johnson, Johnson and Holubec, 1994). For example, the use of roles makes it possible for each group member to be essential for the group to successfully perform the task and achieve the objective. Roles also allow children take bigger control of the activities carried out, and to promote concentration and self-esteem.
- *Thoughtful inquiry.* An environment is created in which citizenship is practiced and reflected upon. In CADE, children engage in inquiries about situations and dilemmas of civic life, and about key concepts related to what they are experiencing, such as deliberation, citizenship, community, participation, agreement, consensus, justice, conflict or democracy. To support this element of reflection, we have resorted to the use of narrations as in Philosophy for Children (Lipman, 1998). The curriculum includes a series of short stories about a group of children who feel affected by what happens in their community and want to do something about it. These stories help the children imagine, understand the meaning of important concepts, explore feelings, and discover new ideas that would be otherwise too abstract.
- *Participatory theater.* The Brazilian dramatist, Augusto Boal, created in the sixties the methodology of participatory theater as an instrument of political literacy and social transformation (Boal, 2004). It consists of a series of exercises, games and theatrical techniques that provide insights and alternatives for social and interpersonal problems. Using these techniques, children can express their views and ideas and deepen their understanding of the world not through verbal rational discourse, but through more emotional dimensions of thought and communication. These are vital tools to promote, for example, perspective taking and the ability to devise alternatives to the situations they live.
- *Deliberation as the basis for group dynamics.* Deliberative competence can only be developed if incorporated as part of the normal dynamics of work within the group, as the usual way of making decisions, managing relationships and resolving personal conflicts. In CADE, deliberative procedures are present in all the activities.

### ***The role of digital technologies***

As seen above, the main purpose of integrating digital technologies into citizenship education programs is to offer students opportunities to broaden and enrich their identity and action as citizens. From this perspective, the curriculum that we developed considers the following uses of technology:

- *Problem solving and research.* Technologies and digital resources are valuable tools for researching and supporting problem-solving processes. Students can strengthen their inquiry strategies and expand the sources and means by which they obtain information. In CADE technological resources play a critical role in every stage of the research and action process.
- *Participation in online deliberative processes.* One of the main impacts technologies are having in civic and political life is the opportunity for interaction, collaboration and deliberation among citizens. Children should be able to learn to interact effectively, responsibly and safely in these new environments for dialogue and collaboration. In CADE's website we incorporated the *Online Preferendum*, a tool based on developments by Newman and Emerson (s.f) that allows geographically distant children to discuss and make decisions in a democratic manner on issues currently affecting the country. The participants decide on what problem they want to discuss, propose solutions, argue them and reach an agreement on a plan of action. The discussion is based on the

preferendum, a system for voting, conflict resolution and decision making, which aims to generate the highest possible level of consensus among those called to take action.

- *Digital production and dissemination of proposals.* A key aspect in which technologies can contribute to citizenship is the possibility for the children to create digital productions that reflect their proposals and ideas, and disseminate them to a variety of audiences. In this respect, it is especially valuable for students, with the help of technological resources, to express and systematize their own contributions and suggestions for improvement, and communicate to the public interest or responsibility in the matter.

CADE has a web platform that integrates the mentioned tools and usage possibilities ([www.fod.ac.cr/cade](http://www.fod.ac.cr/cade)).

#### 4. An approach to CADE’s learning outcomes

This section presents data on three dimensions that enable a better understanding of the children’s experience and learning outcomes in CADE’s program for elementary schools. The information stems partly from a formative and impact evaluation carried out in 2009 (Moreno and Acon, 2009). Among other things, this evaluation looked at the self-reported effects of the program in a group of graduate CADE students and at the perceptions of a sample of current participating students<sup>iv</sup>.

##### *Children’s main concerns*

Since the beginning of CADE as a program in 2004, public insecurity and pollution appear to be the main issues to which the participating children have devoted their attention. In order to explore this with more detail, the issues addressed by the 26 groups of children who participated in CADE in 2009 are examined<sup>v</sup>. Table 2 compiles in 3 main categories the problems selected by the groups of children after reaching consensus.

**Table 2**  
**Issues addressed by children participating in CADE in 2009**  
**(N=26 groups)**

Topic	Frequency
Insecurity	14
Environmental Pollution	10
Others	2

As shown in Table 2, the main concerns of children revolved around their experience of insecurity in their communities<sup>vi</sup>, according to the following breakdown:

1. Drug addiction among youth in the community (5 groups)
2. Fast driving cars in front of the school (4 groups)
3. Abandoned and deteriorated areas in the community turned in dangerous places (2 groups)
4. Criminal activity of youth gangs in the community (2 groups)
5. Fierce dogs loose in the community (1 group)

The first thing to be noted is that insecurity is a concern shared by the adult population. Costa Rican 2005 Human Development Report presents fear as "a chronic feature" of our society (UNDP, 2006). According to the National Security Survey 2006 (Madrigal, 2007), 33.1% of the population points to insecurity as the main problem faced by the country, ahead of the economic situation (28.8%). The 75-76% of the population believes that insecurity poses a serious threat to the country’s future welfare (UNDP, 2009).

What is the basis of this concern? Although Costa Rica is considered a low criminality country, at a considerable distance from other nations in the region (UNDP, 2009), its inhabitants note with alarm the increasing crime rates and fear losing their status and identity as a peaceful and secure country. Costa Ricans have the lowest homicide rate in Central America, comparable to Europe, but between 2000 and 2008 it almost doubled, from 6 to 11 per 100,000 inhabitants (UNDP, 2009). The rate of robberies has also risen sharply, more than 30% between 1998 and

2003 (UNDP, 2006). The victimization rates<sup>vii</sup> almost doubled in less than 2 decades, from 20% in 1986 to 38.7% in 2004. Theft on public roads increased by more than 15 times in the last 15 years, reaching a level almost 8 times the average in developed countries (UNDP, 2006).

Similarly, there is a tendency to associate insecurity with the traffic and consumption of illicit drugs: in the public imagination the offender takes the form of a male, young drug addict (Madrigal, 2007). Undoubtedly this has to do with the rate of the illicit-drug offenses rate that increased by 226% between 1998 and 2003 (UNDP, 2006), as well as with the growing fear of homeless drug addicts on the streets<sup>viii</sup>. The focus groups survey conducted for the Human Development Report 2005 captured the deep concern that parents feel about the threat posed by the phenomenon of drug addiction especially for their children (UNDP, 2006).

Being part of this reality and being exposed to the adult and media discourse on these issues, it is perfectly understandable that children reflect these concerns. Of course, this does not mean that children's worries have no basis and that they are not suffering in several ways the effects of the above described phenomenon. For example, one of the main consequences of this atmosphere of fear is the limitation of opportunities for the children to enjoy public spaces and recreational facilities. According to a special survey conducted for the 2005 Human Development Report on the perception and the actual situations of insecurity experienced by children in marginalized urban communities (UNDP, 2006), in all schools visited some groups of children said they had stopped doing certain activities like going outside to play or run errands, out of fear.

On the problem of drug addiction among young people, the fears of children also have a real base. Although the data suggest that in Costa Rica drug use is relatively low, there are concerns about the age of starting consumption being increasingly younger. According to unpublished data from a study by the Institute on Alcoholism and Drug Dependence, 2003, in a national sample of 600 children in fourth grade, 7% smoked actively, 23.3% had at some time tried alcohol and 14% had consumed alcohol in the last month. Two percent of respondents had used a drug other than alcohol and cigarettes at least once (UNDP, 2006).

In short, three main conclusions can be derived from the concerns expressed by the children in CADE. Firstly, the children are feeling insecure in their communities, which should be a wake-up call for families, educational officials and generally for adults. It requires that the entire community think of ways to reduce their vulnerability to real hazards and to the prevailing atmosphere of fear.

Secondly, there is a need to reflect, especially in the context of CADE, about children's dependence on the set of beliefs associated to the "popular perception" of insecurity as these rest quite often on questionable evidence (UNDP, 2009). Children's projects show weak capacity of confronting wide held assumptions such as that the atmosphere of insecurity is primarily caused by young drug users or that insecurity can only be fought with an iron fist<sup>ix</sup>.

Finally, problems related to the environment, another concern addressed by the children year after year require greater attention. Below we list the specific issues addressed by the participating children in 2009 related to this subject:

1. Waste management in communities (4 groups)
2. Contamination of soils and rivers by industrial waste from intensive agriculture and livestock (4 groups)
3. Sewage collection (1 group)
4. Pollution in general (1 group)

This is a concern not shared equally by the adult population, even among young people. According to the Youth National Survey, only 0.6% of young people between 15 and 35 years consider environmental problems to be the most severe<sup>x</sup> (United Nations Population Fund, 2009). This could be showing on the one hand, the particular sensitivity of children towards nature and, secondly, the significant efforts made by the country in terms of environmental education. It seems that the identity of Costa Rica as a country that values and protects its natural resources sinks deeply into children from an early age.

### Children's community action plans

As we did with the concerns raised by children, their proposals and action plans also deserve to be discussed in some detail. This allows a closer look to the way they may be understanding their role as citizens as well as the identification of aspects that need to be reviewed or improved in the program design or implementation.

**Table 3**

**Types of actions conducted by children participating in CADE in 2009**

Action Type	Frequency
Contacting the authorities to request their support or intervention (by letter or email, or in person in the case of the municipality or the school authorities)	11
Giving talks (by themselves or by experts), going talk to the neighbors house to house (for example, asking to sign a commitment sheet and to provide a comment)	8
Distributing newsletters, brochures or posters in the school or the community (for awareness or reporting), a school newspaper	7
Direct interventions in the community (collecting garbage, sharing towels and soap for washing hands, installing a waste collection center for recycling purposes, collecting money to fix the park, etc.).	3
Artistic activities (a mural, street drama, etc.).	2

Table 3 indicates awareness-raising activities such as giving talks, handing out brochures or doing street drama, aimed at providing information and changing attitudes and behaviors of community members. This type of action shows up mainly in projects addressing insecurity issues -such as substance abuse or the presence of gangs-, and waste management in the community.

In the case of drug abuse, children usually propose action plans that have to do with handing out information to other children and youth in the community, in order to prevent them from adopting risk behaviors. In the case of waste management and water pollution, the purpose of these activities is to sensitize the community about the importance of protecting the natural resources and to recommend recycling practices.

Children resort to the competent authorities when they address more specific and defined problems for which the intervention of a government body is required, or when the solution involves reporting a complaint. For example, they have used this approach when they detect the need to install a traffic light or better road signs in the streets of their community, or pollution issues involving local companies or industries.

Especially when dealing with complex problems such as insecurity, drug addiction or pollution, groups sometimes find it difficult to make a deeper analysis of the causes and manifestations of the problem in their communities. This could lessen their chances of raising plans of action with chances to have some sort of public impact. This is partly due to the fact that some facilitators have conducted the children through rather superficial processes, limited to getting a general view of the problem and quickly moving into thinking about how to "make it known" in the community. Such a practice prevents children to deepen their understanding and perspectives, thus limiting their chances of gaining wider repercussion. This surface approach is reflected in the answer of a child that was asked to summarize how his group addressed the research component: "*we were looking for information on pollution and the teacher asked us how we could solve it and we answered not throwing garbage.*"<sup>xxi</sup>

In fact, though the impact of CADE's groups in their communities has not yet studied, children and facilitators, consulted in the context of CADE's impact assessment express doubts about their influence. For example, in the case of requests presented to the authorities, both children and facilitators report that most often they get no response or follow-up.

In the case of community awareness-raising activities, it is difficult to estimate what their impact may have been. What can be observed is that, for some children at least, what remains of their passage through the program is the



reflection about how to conduct themselves with regard to drugs or the environment protection. As discussed in the next section, when asking children about their learning in CADE, there are many references to the adoption of such practices on a personal level, while the possibility of engaging with others in order to generate a change in the community is mentioned less often than expected.

Interestingly, the children seem to have been more effective in the context of their own schools, as they often combine their action in the community with some type of collaboration in their educational context. Some examples of this are a plan to address violent and dangerous games among younger students during breaks, contributions to repair the toilets, talking to parents to avoid crowds at the entrance, or the launching of a recycling program. According to available reports, these actions were remarkably effective and well appreciated by the school community.

It is hoped that the actions of children can have greater resonance in their communities, because of the effects that this could have in terms of improving their well-being and personal agency. The mere fact of them being actively involved in their community brings about positive changes for them, especially a stronger sense of community belonging and the development of the disposition to contribute to its development and welfare. In the words of one facilitator, referring to the importance of the children's community action: *"it does not bring a solution because it takes a lot to solve a problem, but only the fact that they have a proposal for the community is very valuable."*

***The changes reported participating children***

Results of the children's participation are presented for children currently enrolled in CADE as well as for graduates of the program. The question for the former group was, *"Has being in CADE has changed things on you?"*. For graduates the question was *"Has participating in CADE generated changes in your life?"*<sup>xii</sup>.

**Table 4**  
**Major changes experienced by graduate and participating students in CADE**

	Participant E. (N = 101)		Graduate E. (N = 53)	
	No.	%	No.	%
Less fear of speaking and interacting with others	27	26.7	9	17.0
Increased interest and commitment towards community	11	10.9	19	35.9
Increased ability to listen and dialogue	9	8.9	7	13.2
Increased ability to interact with others and work together	12	11.8	1	1.8
Others	10	9.9	8	15.1

As Table 4 shows, children's responses about the changes they have experienced after passing through the program, can be grouped into 4 main categories: less fear of speaking and interacting with others, increased interest and commitment towards community, increased ability to listen and dialogue, and increased ability to interact with others and work together.

Additional detail on the children's responses reveals the following.

- *Less fear of expressing themselves and interacting with others.* This is the most common response category among participating children (26.7%), and the second most common for graduate students (17.0%). For the former, the emphasis seems to be in having lost the fear or embarrassment of speaking to an audience: *"I don't feel embarrassed to speak to classmates anymore", "my fear of public speaking [changed]", "[I changed] my way of thinking, and I am not afraid to speak my mind", "before I was nervous, I felt embarrassed."* On the contrary, graduate students stress having overcome the shyness that hindered their relationship with other school children:

"being closer to peers, not being that antisocial anymore, meeting new people, before it was more lonely", "before I was very serious, it has helped me to open up, now I speak a little more and I can talk to all my classmates without feeling ashamed", "before I was shy and now I'm not, I get along with anyone". For this group of students, it is not so much about being able to speak in public as being more capable of interacting with others and being part of a group. After the experience of CADE, overcoming shyness seems to have this major utility for them. Curiously, both groups refer to losing the fear to speak and interact primarily in the peer group, not so much with regard to adults. This outcome is due in large part to the creation by the facilitator of a "safe" environment for the participation of children, one in which acceptance, respect and group self-regulation is promoted.

- *Increased interest and commitment to the community.* This is the most common category mentioned by CADE graduates (35.9%), and the second most common among participating children (10.9%). The fact that the latter were interviewed before they had carried out their action plan, may perhaps explain in part their smaller number of responses related to this category. Both groups claim that they have increased their awareness and commitment to the welfare and development of their communities, especially on environmental issues: "I do not like to see things run, or the river polluted, I have changed", "I think a little more on others and not only me, I worry about the community", "Yes, thinking of taking care of the community, no damaging it", "Now I collect garbage all the time, if someone throws something on the floor in front of me, I go and tell him to throw it in the trash", "I try to recycle now, before I did not do it, I did not attach much importance, now I care more about the situations in the community". These statements suggest that the program may be having positive effects in terms of strengthening the children's sense of belonging and emotional attachment to their community, which is critical for the development of capacities for deliberation and active citizenship. Children's responses reveal a greater willingness to identify situations that affect the general welfare and possibly also to contribute in various ways to the solution. With regard to this last specific point, it appears that for some of them what has been reinforced is their sense of personal responsibility regarding the adoption of practices such as recycling at home or not littering in public places. Further research is needed in order to verify this. Stronger evidence of children's conscience of their capacity to participate together with others and have an impact on the community is expected.
- *Increased ability to listen and dialogue.* This type of change is mentioned by the 13.2% of graduate students, and by the 8.9% of currently participating children. The latter refer mainly to the ability to listen, respect and dialogue with others: "I learnt to respect the verbal space of my teammates", "I learnt to discuss, to dialogue, communicate", "I learnt to respect the opinions of others", "I raise my hand before speaking and respect my teammates more", "If I have a conflict now, I dialogue". Graduates are more profound in their responses. Their responses relate to the capacity not only to listen but also to value and take the perspective of others. For example, "Previously I had no tolerance, I did not have the capacity to listen to the views of others", "It was like learning to listen to people, I learned that not only my opinion is worth", "I learned to value friends and others, you have to accept what they say, what they propose", "Before I did not know to listen to other people, I only cared about myself, now I can understand people better", "I am more sociable, one has to adapt to people, not all are equal to one". It is noteworthy that it is this dimension of listening, valuing others, that children mention above other elements of the deliberative capacities.
- *Ability to relate better and cooperate with others.* This dimension is referred to primarily by participating children (11.8%). For example, "I have become more respectful and I learned to relate to my peers and others", "Before I was very quarrelsome and I did not work well in groups", "I have learnt to be a better team member", "I have seen why it is important to work in teams, to respect, to help".

## 7. Main lessons learned

### *The importance of creating safe spaces for participation( taking time to develop trust and mutual understanding)*

The main effect that children report of their participation in CADE is a reduced fear, embarrassment or shyness to speaking in public, to expressing their views and addressing others. Moreover, it arises not only as something that children exclusively associate with their interactions within CADE groups, but as an impact that lasts over time.

Such an outcome cannot be held as minor, if we consider the dominant patterns of interaction and socialization in traditional school settings. CADE creates a space for children to experience free expression, participation and self-regulation, and a new relationship with the educator. This type of environment means a rupture with the still dominant school culture, at least in Costa Rica, a culture in which, for example, "no talking" is often found as a standard classroom norm.

This difference was conveyed by some children during the interviews: "[CADE] means a time different to class time". In their responses they bring about two particularly important features:

- Having a voice ("In class we could hardly give an opinion", "I like that we are respected, we are taken into account").
- Generating relations of solidarity and camaraderie with colleagues ("We all joined together as friends", "I felt accepted, happy, among friends, no one was despised, and we all treated each other well", "Whenever we had a problem, we talked about it and then we made up").

These perceptions, along with the main impacts reported, confirm the good decision of starting the program working on trust, acceptance and group dynamics. This allows the creation of safe spaces for participation. In fact, in CADE it often happens that the first stage of the process is lengthened due to the difficulties experienced by the groups to build this new environment, which differs in several ways to what they live every day in their environment.

It would be valuable thus that citizenship education programs pay attention to the creation of relations among participants based on trust and mutual understanding.

### ***The importance of ensuring successful experiences of community participation***

Children who have participated in CADE claim to have increased their concern for the community, which we believe reflects a strengthened social and political bond. To a lesser extent they mention their capacity to participate in and have an impact on public life. We also observe that for some children the experience has meant more learning to fulfill the duties attributed to good citizens than projecting themselves into the community as agents of change and subjects of rights. The discourse about the need to help the community –sometimes merely involving the adoption of personal habits and practices that contribute to its welfare or at least which do not damage it– appears to be predominant. These children do not seem to have built this speech upon a conscious and rights-based identity as citizens.

Several factors may be contributing to this. First, certain limitations related to the implementation of the program reflect difficulties of not devoting sufficient time to the implementation of community action plans. They also reflect the inhibition observed in some facilitators in leading the groups towards more robust action plans with bigger chances of having real impact.

Another important factor to consider is that regards the identity and experience of educators themselves as citizens. It should be noted that CADE facilitators are recruited from among teachers in educational computing who are not necessarily familiar with experiences of participation. Some may not see themselves as active citizens. Being introduced to a program like CADE may also represent the first time they have tried to have some political impact on a community problem. If the training offered to these facilitators does not compensate for this lack of familiarity and experience, some may find it difficult to pass on to children a more inclusive notion of citizenship and to help them develop action plans with more opportunities to have an impact real public life of communities.

Ensuring that children have experiences of successful participation is undoubtedly difficult. It marks a break with visions and structures that are deeply rooted in society: "To some extent, child participation may be seen as more controversial, challenging or difficult to implement than measures supporting child survival, development and protection because it is based on presenting children as rights holders rather than as recipients of charity" (UNICEF,

2009: 31-32). But consider it one of the key ingredients that should include public education programs. Equally necessary is to ensure that children know and fully understand their rights to participation. Recalling the participation rights of children and relating these to actions that are made as they move through the programs must be constantly reinforced.

### ***The importance of helping children develop a critical look on community problems***

When analyzing the issues brought about by the children in CADE, the dominance of a few of them was apparent as well as the influence of adult popular discourse on children's ideas, particularly in the case of public insecurity. While it is somewhat inevitable that children will participate in this discourse, CADE and other citizenship education programs provide children with opportunities to have gathered reliable information and practice evidence-based reasoning and critical discussion of ill argued claims.

This does not in any way question or minimizes the concerns raised by the children. On the contrary, in a program such as CADE, it is especially important to pay attention to these concerns and to analyze what may be causing them since the purpose is to give children the tools that can help them cope with the situations they worry about. However, this is not incompatible with helping children to overcome superficial, simplistic or restricted thought whenever it may be necessary.

There are a number of recommendations that citizen education programs may follow to improve children's thinking skills and dispositions, derived from the work done by Harvard's Zero Project. These include increasing the use of precise thinking language (Jay, Perkins and Tishman, 1994), practicing effective thinking routines and making thinking visible ([www.pz.harvard.edu/vt](http://www.pz.harvard.edu/vt)).

However, it would also be important to check whether the methodology of the program is somehow encouraging the repetitive emergence of certain issues. For example, the fact that the community diagnosis carried by the children lies largely on tours to the community and mapping exercises could be focusing children's attention on issues of high visibility -things that are detected just by strolling through the streets of the community (garbage accumulation, polluted nearby rivers, concentration of homeless people or drug addicts in some areas, the abandonment and deterioration of certain public places, lack of safe passages for pedestrians, etc.).

## **8. Final Thoughts**

In the process of scaling up our initiatives, we have learnt that defining a certain set of skills and devising a curriculum is only the first part of the challenge. The second and even more complex part of it lies in developing in teachers or facilitators the frameworks and competencies that will enable them to generate those learning outcomes in a reliable way in many settings, in dissimilar circumstances, and with little supervision.

Though there exist very interesting initiatives designed around peer learning strategies, the success of our educational initiatives still depends to a great extent on the teacher performance as orchestrators of effective learning processes. That is why school based citizenship education programs need to invest in evidence-based and thoughtfully designed teacher development strategies. In this regard, we should assure that our teacher training and development approaches allow for 3 things to happen at the same time: a) teachers need to become aware of weaknesses in their own practices, b) they need to have access to precise knowledge about best practices, and c) they need to be motivated in order to adopt changes (Barber and Mourshed, 2007). These elements have been proved to be prerequisites for teacher change and can be mostly achieved in the context of a school culture that enables teachers to learn from each other, engage in teamwork, and practice coaching on a regular basis. This sort of development dynamics heavily bear upon the existence of a well focused school leadership which additionally, in the case of citizenship education efforts, it has to further take on the promotion of a school ethos that allows participation and democracy to be experienced -very specially by the children. In CADE we are highly aware of the necessity of working further in these two directions in order to lay the adequate structural conditions that can lead to more effective learning outcomes.

One last issue that needs closer attention revolves around the age and gender differences in children participating in CADE. Though on that regard the data available to date don't allow us to draw any definitive conclusion, we think that such distinctions deserve to be explored in future studies.

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<sup>i</sup> The Project's main publications, a citizenship education manual and a guide for implementing active citizenship as a whole school approach at the high school level, will soon be able to be downloaded for free from the Project's website [www.fod.ac.cr/constructoresdemocracia](http://www.fod.ac.cr/constructoresdemocracia).

<sup>ii</sup> The teaching guide for facilitators as well as the theoretical and methodological documents, can be free downloaded ([www.fod.ac.cr/librocade](http://www.fod.ac.cr/librocade)).

<sup>iii</sup> Earls and Carlson (2001, 2002) identify 4 major principles that should be present in the deliberative process, based on the Habermas' dialogical ethics. These 4 elements represent the pillars of the ideal speech situation and help to define more precisely the concept of deliberation: 1) *Trust*, as the awareness of the possibilities and situations of the other, and the opportunity to share an ethical framework for social action. 2) *Perspective taking*, which means understanding the feelings and emotions of others, as well as the reasons for their behavior. 3) *Mutual understanding*, which refers to a common knowledge based on an agreement hold as valid, and therefore binding, reached thanks to the application of scientific thinking processes to determine the authenticity, precision and value of information (critical thinking) as well as perspective taking. And 4) *Social shared action*, understood as prosocial action oriented by norms and values which the group recognizes as valid, and which involves cooperation, coordination and regulation.

<sup>iv</sup> 53 graduate students from seven different schools were interviewed by telephone. The sample was made to convenience, since data were available only of those who responded in time to the invitation to take part in the evaluation. Their ages range between 12 and 17 years old, and 37.7% were men and 62.3% women. With regard to currently participating children, a questionnaire with open and closed questions was applied to 101 students from eight schools that were part of the program in 2009.

<sup>v</sup> In 2009, the size of the groups ranged from 24 children to 12, being 17 the average. The program guidelines establish that groups should be made up ideally of 12 girls and 12 boys, but the final gender and number composition depends on the size of the school and the volunteers that ask to participate (children join CADE voluntarily). It is frequent that groups lose some of their participants as the school year draws on, due to a range of factors including timetable incompatibility, the need to attend other commitments (school work, housework), lack of interest or even lack of parent's permission.

<sup>vi</sup> The same concern was also reflected in the Online Referendum on the problems facing the country carried out in 2009. From all the problems they posed (corruption in public administration, lack of recreational spaces for children and youth, family breakdown, etc.), children finally selected public insecurity.

<sup>vii</sup> The percentage of households in which a family member was the victim of a crime in the 12 months preceding the interview.

<sup>viii</sup> According to the UNDP (2006), mass media and the press reinforce this association. For example, La Nación, one of the most prestigious national newspapers in the country, published on August 26, 2009 the following news: "San Jose becomes unsafe due to addict indigents" ([http://www.elcomercio.com/noticiaEC.asp?id\\_noticia=300174&id\\_seccion=344](http://www.elcomercio.com/noticiaEC.asp?id_noticia=300174&id_seccion=344)). In local newspapers it is also possible to find similar examples. A local newspaper from the area where two of the participating schools are located entitled a piece of news in 2007 this way: "Drug addicts and robberies frighten neighbors" (<http://www.sancarlosaldia.com/noticias/notas-generales/drogadiccion-y-theft-scare-a-vecinos.html>). It talks about the large number of assaults and the presence of drug addicts in the central park of the community during daytime hours.

<sup>ix</sup> On the Online Referendum, the solution favored by the children for public insecurity was to "be tough on criminals."

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<sup>x</sup> Insecurity is considered the country's main problem by 24.5% of the survey participants. Insecurity is followed by poverty (22.9%), drugs (10%), political corruption (9.2%) and lack of employments (8.9%). Environmental problems are among the least mentioned topics: only above "attitudes" (0.4%).

<sup>xi</sup> The sentences in quotes are transcripts from responses to interviews, in the case of graduate children, or to a questionnaire in the case of currently participating children.

<sup>xii</sup> It is important to note that these results are consistent with the statements of the facilitators. When asked about CADE's impact on the children, their responses referred primarily to 1) losing the fear of public speaking, 2) projecting themselves to the community and strengthen their feeling of belonging and 3) increased capacities for dialogue and agreement reaching.