

Interdisciplinary and Intergenerational Project, *Ulisses' Pirate: An Empirical Study in the Context of Basic Education*

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ABSTRACT

The aim of this study was to analyse the impact of an interdisciplinary and intergenerational educational experience in the elderly, in teachers, students and their parents or guardians. Creative Dance and Drama Workshops were articulated with Portuguese, PE, Arts and IT subjects. A total of 20 6th graders, their parents or guardians, five teachers and 15 elders participated

in the study. An analysis of 194 free evocations based in the free word association technique was performed, along with 17 semi-structured interviews. From the literary texts “Os Piratas” and “Ulisses”, an expressions-based work was proposed, where drama and movement games were explored. Evocations of the central core were of Friendship, Learning, Affection, Solidarity and Interaction. Of the 264 text units analysed, interaction with the elders was highlighted. In the teachers’ perception about the subjects and workshops involved in the project, a valorisation of IT and of Portuguese was registered. It is also relevant the amount of references to values and to the Interaction with the elders. This interdisciplinary and intergenerational project has revealed itself valuable for the integral and humanistic training of the students, having also given rise to corporeal artistic and emotional experiences relevant to their well-being.

Keywords: Interdisciplinarity; Intergenerationality; Basic Education.

INTRODUCTION

The integration and contextualization that today’s school aims for should not only guide children’s education, but also the educational intervention with other age groups. On the other hand, intergenerational work between children and the elderly may act as a facilitator of inclusive, integrated and creative social practices. Accordingly, the benefits of articulated intergenerational work are recognised in various domains, which the area of gerontology is an example (Carlson, Saczynski, & Rebok, 2008; Kaplan, Liu, & Hannon, 2010; Ouellet, Romero, & Sawchuk, 2016).

Recent concerns with ageing, despite their legitimacy, cannot justify prejudice associated to age nor be promoters of social cleavages between the young and the elderly, and the active and retired population. In this sense, initiatives that promote interaction between these populations might start an attitudinal change of the young towards the elderly (Bales, Eklund, & Siffin, 2010; Knapp & Stubblefield, 2010).

The aim of this study is to analyse the impact of an interdisciplinary and intergenerational educational experience in the elderly, teachers, students and their parents or legal guardians, raising awareness in the scientific and educational community about the benefits of intergenerational and integrated practices with the children and the elderly. Therefore, theoretical assumptions underlying this work are firstly presented. After, the educational experience “Ulisses’ Pirate” is presented and analysed in detail.

INTERGENERATIONAL AND INTERDISCIPLINARY PROGRAMMES

An intergenerational programme is defined as a social vehicle that allows to different generations the opportunity of integration and involvement with matters related to society (Generations United, 2002). Operationally, it is expected that these programmes have some reciprocity of their cognitive, social and affective benefits. The number of studies about intergenerational studies in relevant scientific journals underlines the scientific robustness of this field of study (e.g., Bales, et al., 2010; Carlson, Erikson, & Kramer et al., 2009; Kaplan, Lin, & Hannon, 2010; Knapp & Stubblefield, 2010; Villas-Boas, Oliveira, Ramos, & Montero, 2015). In this sense, several social policies that promote the social integration of the elderly in the community have arisen. The promotion of spaces of intergenerational integration that have an educational and socializing role is deemed as a relevant strategy for a successful ageing process. The desirable biopsychosocial balance of the elder is achieved with the help of social policies, the family, friend networks and groups of interest, all together in the struggle against discrimination and prejudice that gravitates around old-age in the western culture (Ferreira, Maciel, Costa, Silva, & Moreira, 2012).

In the case of the elderly, the benefits that derive from these practices may be of social, functional or mental nature, something that has been recurrently indicated in the relevant literature (for a detailed explanation, "Experience Corps" - Gruenewald, Tanner, Fried, et al., 2016).

Regarding the benefits of this type of programmes, it is important to refer the positive impact that they have in school performance. For example, in schools where the elderly was a regular presence (volunteering for 15 weekly hours), children improved their results in reading (Rebok et al., 2004). Additionally, interaction with the elderly promotes the development of social competencies, such as communication, problem solving, positive attitudes towards the elders and communitarian sense of helpfulness (Corporation for National and Community Service, 2005).

Bales, Eklund and Siffin (2010) note that the young tend to improve their concept of elderly after having participated in intergenerational programmes. Volunteering with them, in a context of proximity, also allows the development of the young's' social and personal components.

Within the scope of interdisciplinary projects and having the integration of different areas of knowledge in education as reference, an excessive fragmentation of knowledge in separate areas is still present. The disciplinary "division", albeit necessary, has not provided the needed flexibility in order to promote the articulation and complementarity of

contents that belong to various school subjects. Russell and Zembylas (2007) present three arguments in favour of the role of artistic subjects in integration: 1) the promotion of stimulating intellectual and emotional learning experiences; 2) the development of forms of knowledge that link different areas; and 3) the improvement of learning and creativity. Accordingly, school interdisciplinarity is considered an efficient approach to the learning process, respecting not only what the students know but also their integration (Fazenda, 2015).

RESEARCH METHOD

Objectives

The project “Ulisses’ Pirate” was based in the promotion and implementation of interdisciplinary and intergenerational practices and worked on the artistic, cultural, social and human components. It had the following objectives: 1) to know the opinions of students, parents, teachers and the elderly regarding the project; 2) to produce a positive effect in the elders’ well-being; 3) to contribute to a more holistic and integrative training of the student.

Participants

A total of 20 sixth grade students (nine boys and 11 girls, 11.72 ± 1.10 years), 20 parents or their legal guardians (42.63 ± 4.54 years), five teachers (51.81 ± 4.66 years) and 15 elders (10 women, five men; 81.42 ± 9.99 years) participated in this study. The parents or legal guardians signed a free informed consent at the beginning of the school year, allowing their child to participate in the project.

“Ulisses’ Pirate” Workshops

The integrated and intergenerational practices of the project were composed of Creative Dance and Drama workshops, taught by two external specialists that did not belong to the school staff and had not had prior contact with any participant. Drama Workshops were held during the whole school year (October 2015 to June 2016) and Creative Dance started in mid-February and ended in June 2016. Each session lasted 50 minutes.

These workshops articulated with other subjects: Portuguese, Physical Education, Music Education, Visual Arts, and Information Technologies. From the texts “Os Piratas” by Manuel António Pina and “Ulisses”, by Maria Alberta Meneres, an expressions-based work was done, exploring drama and movement games, as well as the construction of puppets with both students and the elderly. This exercise, named “Ulisses’ Pirate”,

was presented at the end of the school year to the educational community and terminated the intergenerational and interdisciplinary programme, where both young and elders interacted in a context of integrated and expressive practices. The convergence of Dance, Drama, Music and Visual Arts allowed play, sharing and dreaming.

Instruments

Free evocation of words technique. Abric's Central core theory (Abric, 1998) was used to know the opinions of students, parents, teachers and the elderly regarding the project. The free evocation of words technique was used, with the following instruction: "write the first five words or phrases that come to your mind when you think of intergenerational practices" (induction term).

Semi-structured interviews. A total of 17 semi-structured interviews were made to four elders, four students, four parents or legal guardians, four teachers and one element of the school board. Two interview scripts (one for students, teachers, parents and legal guardians; the other for the elderly) were sent to four experts in the research field and changed accordingly. This process was then repeated with another panel of experts. The first script had questions including: 1) Tell us about the good things that happened in this project. Were there any bad aspects? Can you tell us which subjects were part of this project? 2) What do you think of the work that you did in Drama and Dance sessions? 3) What solidarity-oriented activities/projects did you do this year in school? In What ways this kind of activities may be important for the students?

For the elderly, the following script was used: 1) Tell us about the good aspects of this experience. Were there any bad aspects?; 2) In what ways did you change with this experience?; 3) Which activities did you enjoy the most and why?; 4) Which activities did you enjoy the least?; 5) How did you feel/which emotions did you experience before, during and after participating in the activities with the children?; and 6) How the children react when they were with you?

Formal and ethical procedures

Data gathering was done from June 12 to 15, and after the end of the project. The interviews were done within the school premises and in the retirement home, individually.

The intervention and investigation aimed to guarantee the respect of all ethical standards, assuming maximum confidentiality. The participants in the study were informed about the particularities of the present research. A formal authorization from the school's pedagogical council and from the

retirement home was also obtained. In order to obtain informed consent, a formal presentation letter was sent to the children's parents or legal guardians where they were informed about the objectives and implications of the study, having anonymity and confidentiality being assured. Each participant manifested their acceptance in participating in the study in a written consent.

Data analysis

Free recalls. The free recalls, obtained from an inductor term (intergenerational practices), were analysed using a specific software - EVOC v.2005 (Ensemble de Programmes Permettant L'Analyse des Evocations) and SIMI (Similitude) (Vergès, 1993), developed from Vergès techniques (1992, 1994). In EVOC (2005), the recalled words were listed and analysed by crossing its recall frequency with the average order of each recalled word, essentially to understand the central core intergenerational practices and the peripheries. Then, an index of position and one of frequency was calculated, to rank the importance of the word in the set of data collected. The crossing of these two criteria produced a four divisions matrix (Abric, 1994a, 1994b; Oliveira, Marques, Gomes, Teixeira, & Amaral, 2005), in which the terms were classified according to their significance levels. Therefore, the terms that correspond to the central core of representations are in the upper left quadrant. Lower left quadrant contains words considered as contrasting elements, words placed in the upper right quadrant constitute the first periphery. Lastly, the words in the lower right quadrant encompass the external and more flexible elements of the second periphery (Abric, 1994a, 1994b; Vergès, 1992).

Semi-structured interviews

To characterise the opinion of the participants, content analysis (Bardin, 2008) was made using QSR NVIVO software, v.9.0. This was done globally (for all interviews) and specifically (for each participant) by presenting the most referenced indicators in relation to the number of interviews [sources (S)] and the number of coded references [text units (TU)].

Validity was guaranteed by following the recommendations present in the literature for similar studies. Interviews were reviewed by experts, according to Litwin (1995). Before coding, the coders were subjected to a training process and methodological procedures were followed as recommended by Hill and Hill (2002). Intra and inter-coder reliability was tested through Cohen's Kappa (Fonseca, Silva, & Silva, 2007) with results considered as excellent [inter-coder reliability (97.52%) and intra-coder reliability (98.51%)].

RESULTS

Free evocation of words

A total of 194 free evocation of words were obtained from the term “intergenerational practices”. The words were included in the database by the order in which they were recalled, having the order of evocation been matched with their frequency. This allowed a representation with four quadrants, separated by the mean order of evocation (OME) and recall frequency (f), highlighting the possible core and peripheral elements of the representation structure (Table 1).

Table 1: Free evocation of words obtained from the inductor term Intergenerational practices: Order of Evocation (OE), Mean Order of Evocation (OME) and frequencies (f).

Inductor Term: Intergenerational practices					
<i>OE ≤ 2.90</i> <i>f ≥ 10</i>	<i>f</i>	<i>OME</i>	<i>OE > 2.90</i> <i>f ≥ 10</i>	<i>f</i>	<i>OME</i>
Affection	14	2.64	Learn	13	3.62
Friendship	14	2.21	Respect	20	3.20
Learning	14	2.29	Satisfaction-	14	3.70
Interaction	13	2.62	Show		
Fun	18	2.56			
Sharing	11	2.64			
Satisfaction- project	13	2.77			
<i>OE ≤ 2.90</i> <i>5 ≤ f < 9</i>	<i>f</i>	<i>OME</i>	<i>OE > 2.90</i> <i>5 ≤ f < 9</i>	<i>f</i>	<i>OME</i>
Caring	6	2.17	Affectivity	5	3.40
interesting	6	2.50	Happiness	7	3.71
Satisfaction- activities	6	2.60	Well-being	9	3.11
Solidarity	6	1.33	Intergenerational	5	4.60

Of the 194 recalls, 18 different words have emerged, with a mean order of evocation (OME) of 2.9. Regarding the inductor term “intergenerational practices”, the central core is represented by the concepts of Affection, Friendship, Learning, Interaction, Fun, Sharing and Satisfaction-project. The first periphery (higher OE and f values) contains concepts that feed the central core such as Learn, Respect and Satisfaction with the show. The second periphery (lower OME and f values), the terms

Caring, Interesting, Satisfaction obtained with the activities and Solidarity are found. Lastly, the fourth quadrant (higher OME and lower f values) contains the terms Affectivity, Happiness, Well-being and Intergenerational.

Semi-structured interviews

To assess the impact of this educational and interdisciplinary experience, the coded TU are framed in a perspective of positivity or negativity according to its content. Table 2 presents the results according to type of participant.

Table 2: Text Units codified by participant

Intervenient	Positivity		Negativity		TU (Total)
	TU	%	TU	%	
Students	292	80,44%	71	19,56%	363
Teachers	378	85,91%	62	14,09%	440
Parents / legal guardians	404	92,24%	34	7,76%	438
Elderly	139	91,45%	13	8,53%	152
TOTAL	1213	87,08%	180	12,92%	1393

Results show that 87.08% of the total TU were associated with positivity, which reveals the positive impact this project had on them. According to each type of participant, it is possible to verify that parents or legal guardians (98.24%) and the elderly (91.45%) are the groups that indicated a higher number of positive aspects associated with the project. On the other hand, the students are the ones who highlighted a higher number of negative aspects (19.56%).

In students' opinion, interaction with the elderly (S=4; TU=26) and transmission of values (S=3; TU=12) were the main positive aspects of the experience. Teachers, in addition to transmission of values (S=5; TU=32) and interaction with the elderly (S=5; TU=17) referred the exercise "Ulysses' Pirate" presented to the community at the end of the school year as another main positive aspects of the project (S=5; TU=18). A similar opinion was expressed by the parents or legal guardians. To them, transmission of values (S=4; TU=63) and interaction with the elderly (S=4; TU=36) were the main positive aspects drawn from the experience. Lastly, the elderly highlighted

the positive aspects that resulted from the interaction with students (S=4; TU=24).

When results are analysed globally (n=17), participants referred as positive the interaction with the elderly (S=13; TU=79) and transmission of values (S=12; TU=107). Conversely, excess of teaching hours (S=7; TU=37), extra activities in addition to the curricular times (S=6; TU=46), tiredness (S=6; TU=20) and lack of non-organised time (S=4; TU=15) were the aspects deemed as negative.

Lastly, regarding the perception participants had about the subjects involved in the project, the following results were obtained: Art (S=4; TU=21), Portuguese (S=4; TU=16) and Music (S=4; TU=15) were the most referenced by students; Drama Workshop (S=2; TU=4) was the most referenced by parents or legal guardians; Art (S=4; TU=7) was the most evidenced by teachers. In the sum of interviews (S=13, as these questions were not asked to the elderly), Art (S=9; TU=31) and Portuguese (S=8; TU=23) were the subjects that, according to the participants' perception, had a greater participation in the experience.

DISCUSSION AND CONCLUSIONS

According to the main goals of the study and the results obtained, it is possible to conclude that this type of educational practice, with a strong social and artistic component (through the interdisciplinary and intergenerational approach), complements the curricular component of the school, connecting itself with the surrounding community. On the one hand, intergenerational and interdisciplinary practices meet the premise of lifelong education, based in the four pillars of knowledge of Education for the 21st century (Delors, Al-Mufti, Amagi et al., 1996): learn to know, do, be and live together. These pillars of knowledge were pictured when the concepts that emerged from the recalls regarding the project were analysed – Learning, Sharing, interaction, Fun, Affects and Friendship, as well as Satisfaction obtained with the activities of the project.

Additionally, regarding the positive impact that this project had on the wellbeing of the elderly, that these participants regard as positive the interaction they had with the students. The benefits in the elderly and in students that derive from these kinds of social and inclusive processes and in active methodological practices has been widely documented, and this study supports them.

We believe that the positive aspects of this experience, interaction with the elderly and transmission of values, in the students' opinion compensate some less positive references to the project (excess hours, extra activities in addition to the curricular times, tiredness and lack of non-organised time), favourably supporting the contribution of this project for a more holistic and integrational formation of the student. These two aspects are, in fact, highlighted both by

teachers and by the parents and legal guardians. The promotion of this type of formation meets the recommendations of UNESCO (2016), consubstantiated in the central idea of a holistic, ambitious and universal education, inspired in a vision that education transforms the life of people, communities and society. Social, Artistic and Cultural Education, in convergence with intergenerational practices, may materialize tin universal and integralist vision of today's school.

Educational practices should integrate and articulate the different knowledge areas that belong to the school curriculum and, on the other hand, make educational work more dynamic and active incentivising the collaborative and autonomous work of students. The exercise "Ulysses' Pirate", presented to the community in the end of the school year was another positive aspect of the project, as referred by the teachers. Globally, this project reflected an interdisciplinary work, developed by various subjects that compose the 6th grade curriculum.

In sum, this interdisciplinary and intergenerational project revealed as positive for the integral and humanistic formation of the student, through the corporeal, artistic and emotional experienced that allowed, having also developed well-being in the elderly, improving their support in terms of emotionality and conviviality.

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Manuscript submitted: February 14, 2019

Manuscript revised: March 23, 2019

Accepted for publication: April 15, 2019
