

Candide's Innovative Teaching Method Including Purring Therapy

Céline BRUSA¹, Michèle BOURTON²

(L'Isle sur la Sorgue, France)^{1,2}

ABSTRACT

The Independent School - Candide uses an innovative teaching method, including *Purring Therapy*. It was founded by Michèle BOURTON for students aged 6 to 15 years old. For six years now, fifteen cats participate in the students' lives in this extraordinary school and they play their role as therapists going round the classrooms looking for a hug or a cosy cushion to curl up on. Whilst respecting the animals' freedom, they choose to come and go as they please, we have noticed important things in the children's behaviour and academic performance. Purring therapy is now well-known in the scientific world and its proof is now accepted. In our school, students feel reassured thanks to the cats' presence, they no longer worry about going to school and they don't feel stressed anymore. We are seeking to develop a network of Candide Schools (whose pedagogy is not limited to the presence of felines) so that as many students as possible can benefit from these extraordinary learning conditions.

Keywords: learning; well-being; cats; relax; joy

Introduction

Candide's innovative teaching method, including purring therapy, was founded by Michèle BOURTON, who taught for thirteen years in the French State School system. In September 2013, she created the "Candide Private School Group", a unique, small, human-scale establishment where fifteen or so cats circulate freely.

However, what does the presence of these felines bring to the pupils? Does the cats' presence have an impact on school performance or children's behaviour?

Our innovative teaching method is unique in the world and we want to enrich and deepen the understanding of the benefits and contribution of purring therapy, already scientifically validated by English-speaking studies (for the most part).

A better understanding of the benefits of purring therapy on humans could enable other students to benefit from these wonderful virtues and thus evolve in a more relaxed way in the school environment.

How was Candide's Innovative Teaching Method including Purring Therapy Born?

It is Michèle BOURTON's special story that brought about the development of this unique teaching method in the world. Michèle experienced years of childhood trauma, suffering multiple and repeated child abuse by her mother. She was regularly locked up in the cellar, she only survived thanks to the presence of cats who crept in through the cellar's broken skylight. The cats came to warm her up, comfort and nurse her, wash her by licking her swollen wounds.

Many years later, she became a teacher and worked for thirteen years in the French State School system. She found the conditions in this system did not allow the teacher to teach correctly, nor the student to learn, the context did not nurture their confidence or help them to fully develop their skills. She had the incredible idea of opening her own private school, breaking with the French State School framework. Nevertheless, in order for each child to pass national exams, she wanted all academic school syllabuses to be followed scrupulously.

In this new school where students from six to fifteen years old are welcomed, she created an innovative framework in which the student is at the very heart of the project. The student is no longer a stranger in the eyes of their teacher, the pupil is no longer left to their own devices, abandoned in their learning because the adult does not have the time nor the means to take care of teaching them.

At Candide, there are only fifteen pupils per class, which favours discussion and trust between the pupils and the teachers.

In class, the emphasis is on discussion, instead of note taking, this enables the pupils to actively participate, listen, discuss and learn to develop critical thinking.

The pupils do not take any homework home, at Candide homework does not exist. Instead "homework" is done in class during the school day, with the teachers in the primary or secondary school. This has two advantages: first, teachers take part in the complete follow-up of their pupils, which enables them to discern their strengths or weaknesses better. Secondly and above all, family life is radically transformed, giving back parents their true role with their offspring after school.

At Candide all academic subjects are taught and we focus on fluency in both oral and written French.

We teach two foreign languages in CM1 (the equivalent of Year 5 in the UK) (English from CP, the equivalent of Year 2 in the UK) which immediately opens the childrens' minds to the world and different cultures.

In addition, Michèle BOURTON could not envisage life at Candide School without the presence of cats, like those saved her as a child.

"You have to feel at home at school." she said.

Thus over the last six years: two, three, six, nine, then fifteen cats came to live in Candide, bringing with them an atmosphere of peace and tranquility. Step by step, felines and humans came into contact with each other, and we discovered how much our friends the cats were using their powers as therapists to help the children.

We see how purring therapy has been able to integrate naturally and perfectly into a human environment that respects the rhythm of each child.

Cats - Real Therapists!

It is the veterinary doctor Jean-Yves Gauchet who created the term "Purring Therapy" to designate "the care achieved through the purring of cats".

Several studies prove that the low frequency of the purring of cats (between twenty-five and fifty hertz) has soothing virtues on humans. However, as Dr. Jean-Marc Aimonetti of the Laboratory of Integrative and Adaptive Neuroscience at the University of Aix-Marseille explains: *"The cat, like all mammals, perceives low frequencies thanks to sensors located in his skin, called Pacini corpuscles. These detectors transform feline vibrations into electrical impulses and transmit them to the brain, which responds by secreting endorphins".*

Endorphins are popularly called "happiness hormones". These opiates have properties similar to those of morphine and provide a sensation of well-being and reduce pain. It is by this mechanism that the cat secretes oxytocin (which restores self-confidence) and serotonin whose role is known for the quality of sleep and mood.

Dr. Jean-Marc Aimonetti says that the same effects of purring are found in humans: *"As for cats, our skin contains Pacini corpuscles. And these receivers similarly capture the humming vibrations. There is therefore no reason why they do not trigger the production of endorphins, oxytocin and serotonin in our brains, with the same effects. In addition, these low frequencies are the only ones that cross the belly of the pregnant woman and the placenta, so that the baby perceives them. One can thus think that the purring of the cat evokes in the adult man this period of total happiness that he lived in utero, or pleasant sensations of his childhood with, in the key, a feeling of serenity beneficent on our psyche. "*

Dr. Jean-Yves Gauchet completes this theory by explaining that listening to the purr plays through the hippocampal / amygdala path the role of "Madeleine de Proust".

The purring generates vibrations between twenty and a hundred and forty Hertz. These low frequencies could cure certain pathologies.

Decrease in stress: the cat's presence soothes.

Respiratory difficulties: the purring limits respiratory symptoms, in the feline as in humans.

Lowering of blood pressure: our blood pressure drops in the presence of cats.

Bone repair: Frequencies between 25 and 50 Hz have been proven to strengthen bones.

Risk of heart attack: A 2009 American study suggests that cat owners will have 40% less risk of having a heart attack.

Immunity: the purr's vibrations increases our immunity.

Healing of soft tissue lesions: the cats' purring favours the healing of the muscular, tendinous and ligamentary conditions.

However, Purring Therapy is not solely limited to listening to the purring of little cats! Simply by spending time with cats, watching and stroking them it helps to relieve stress and anxiety.

CAT PURRS HEALING POWER
stepintomygreenworld.com

CATS CREATE PURR VIBRATIONS WITHIN A RANGE 20-140 Hz ARE MEDICALLY THERAPEUTIC FOR MANY DISEASES.

STRESS RELIEVER
Petting a purring cat calms down & lowers stress

HEART HEALTH
Cats owners have 40% less risk of heart attacks

WOUND HEALING
The vibrations are helpful for healing tendons and muscles

MUSCLES HEALING
Cat's purr can heal infections and swelling

DISPONEA
Cat's purr lowers dyspnea symptoms.

BONE HEALTH
Frequencies of 25 & 50 Hz are the best and 100 Hz & 200 Hz the second best frequencies for promoting bone strength.

BLOOD PRESSURE
Lowers blood pressure by interacting with the cat & hearing the purring sound.

Source: Gemmabusquets.com

stepintomygreenworld.com

Key Facts about Candide and Sound Bites from our Pupils

Currently, we have seventy students from CP (six years old, the equivalent of Year 2 in the UK) to the third grade (fifteen years old, the equivalent of Year 10 in the UK).

We have not yet done any scientific studies, but we would be interested if researchers agreed to validate the effects of Purring Therapy at school.

You can see on this slide some of the comments our students made when we asked them what difference it made to have cats in their school.

Emma 3rd Grade (the equivalent of Year 10 in the UK): *“If a lesson seems a bit long, the cat helps me to keep concentrating until the end. I stroke it for two or three seconds and then I’m ready to work again.”*

William CM2 (10 years old): *“Cats help me to get rid of stress and fatigue on Fridays, at the end of the week. I stroke them and it makes me feel like I’m at home.”*

Maxime CE2 (8 years old): *“If I don’t understand an exercise, the cat reassures me. I feel less alone and less stressed.”*

Baptiste 4th Grade (12 years old): *“Cats enable us to integrate and get on more easily, as they give us a common centre of interest, that is – cats. They even help us to make up after an argument - as we sit giggling at Crousty and Nalas’ antics!”*

Amandine 5th Grade (12 years old): *“I love to write with my right hand, whilst I stroke the cat with my left.”*

Théo CM1 (9 years old): *“The cat’s purring helps me to concentrate.”*

Mathilda 5th class (10 years old): *“I forget about the noise around me when I hear the cat purring. When it sits on my desk, it helps me to refocus.”*

Lise 5th class (12 years old): *“When I’m sad or angry, the cat does funny poses and it makes me laugh.”*

Case Studies

Here is the story of Nicolas and Camélia.

Nicolas arrived at Candide at the age of twelve in 6th grade (the equivalent of Year 7 in the UK). He came from a Montessori school and had Autistic Spectrum Disorder (ASD). Nicolas read very slowly and was dyslexic (his reading level was evaluated at seven years old). He was dysgraphic and dysorthographic which led to the purchase of a computer by his parents.

Nicolas was very anxious about relationships with peers or adults. He was afraid of cats and sometimes hid under the table. He also hit his head against the wall if he was angry, upset or frightened that he was not going to be able to do something.

Over the four years that Nicolas spent with us, we saw him flourish. Nicolas smiled more and more. He stopped hitting his head against the wall and hiding under the table in the first year. His anger not only decreased at school but also at home.

Little by little, Nicolas approached the cats or rather, they came to him... He spread his jacket on the desk next to his table and waited for Brioche for example to come and curl up in it to go to sleep.

Finally, Nicolas came to class to see Brioche and this privileged relationship with an animal, enabled him to open up to others. His marks got better and better.

When Nicolas left last year at the end of 3rd Grade (the equivalent of Year 10 in the UK) he was a happy, blossoming teenager, keen to enter Sixth Form College where he was top of the class this term! His parents cannot believe how he developed during his time at Candide!

Camelia joined Candide School in September 2017, in 4th Grade (the equivalent of Year 9 in the UK). She was only eleven years old and was two years ahead, as she is an intellectually precocious child.

Her parents chose to enrol her at Candide because Camelia was starting to develop the early symptoms of School Refusal/School Phobia, with repetitive and increasingly intense abdominal pains and significant sleeping difficulties. She was finding it increasingly difficult to go into her school, with large numbers of students and she was perceiving everyday situations as if she was being persecuted.

During our first meeting for her enrolment, Camelia was very smiley and reassured. She said the presence of cats was important to her because she loved them. This contributed to her feeling confident.

From the beginning of the year, Camelia turned out to be an excellent student often nearing perfection in her school work but she remained very introverted and withdrawn when it was necessary to speak in class.

From the first week of school onwards, Camelia no longer needed to take her sleeping pills and made friends. She is one of those students who very often work with a cat on their desk, stroking the cat at the same time as she does her school work with the other hand!

Today, Camelia can now envisage going to Sixth Form College, this is possible as she is less worried about large groups. She was able to soothe her anxieties in a school environment where cats play a great role as healers. Camelia now feels strong enough to face a new environment that she no longer considers frightening or hostile.

Our Observations

These two cases illustrate the beneficial influence of cats in our school. These are children who came to Candide with significant disorders.

However, what about children for whom "everything is fine"?

As we have seen from the quotes of some of our students, they speak a great deal about stress reduction, feeling reassured by the cats' presence and how it helps them to concentrate.

For many students, especially younger ones, contact with an animal is totally new. Some children do not own pets at home or have had very little experience with them. We enable children to discover cats, to learn about their behaviour and feel safe in their presence. Thus, animal good treatment workshops are regularly offered within our establishment, so that we can nourish awareness of animal respect for each year group.

The rules for how to behave with the cats are displayed and allow the pupils to remember how to behave with the animal, so that it does not have a hostile reaction. For example, the pupils know that they should not carry a cat. It is the cat who decides what it wants to do and if the animal climbs onto the child's lap, it can stroke it then. This notion of respect is very important because by respecting the animal, the child also respects their classmates more easily and nature in general.

Contact with cats helps with well-being and self-esteem, our pupils feel cared for, no one is forgotten

Very often, when our pupils enrol for the first time, they talk about how they suffered in their old school by not being heard, feeling like a "pawn" at the back of the classroom whom no one is interested in. They really suffer from this lack of recognition as a valid human being to be watched over.

In our school, because of our small class sizes, this suffering disappears very quickly. With only fifteen pupils in each class, the teacher truly has the time to take care of each one of them, discuss subjects together and bring the child the tailored help they need.

In addition, we wanted to share with you the remarks of some of our students that we questioned about the role of cats in their psychic construction and the feeling of being useful to someone, to exist for someone.

We will take the example of Caroline, a child in 6th Grade (the equivalent of Year 7 in the UK) who told us that she woke up every morning on form, and no longer had a tummy ache. She said she was happy to come to school because she knew that her favourite cat was waiting for her. She could cuddle him before lessons started and that would be enough to soothe her worries.

In our classrooms, the pupils encourage the cats to come near them by putting their jackets on their desks or on the floor. When the cat curls up in their coat, we see the smile of satisfaction light up the child's face, as if to say "*He chose me*".

Contact with cats develops empathy:

We notice that the focus we put on the good treatment of animals encourages our pupils to act with care and attention, with empathy with one another. Indeed, students are more attentive to the needs of their classmates and anticipate them. This is all the more possible as the animal develops the feeling of emotional security.

Relationships between the children are less confrontational than in other schools because of mutual listening and respect. For example, the little ones must learn at the beginning of the year that the cat needs calm. They understand very quickly that if they are noisy, the animal will not want to come into their classroom. As a result of this direct relationship between noise and the animal's absence, the pupils also understand that if they make a noise, it annoys their classmates too.

Contact with cats increases school performance:

All the pupils, without exception, see their academic potential increase. They may not be getting full marks, but they know they are doing their best and that they are at their best. This is important for us. We know that when they leave Candide, at the end of Year 10, the students will be able to choose what they go on to study, not by default, but in full awareness of who they are and their unique abilities. This is a sign of success for us.

Conclusion

Our work is in an observation phase.

The soothing environment created by the presence of cats, breaks down all the barriers that prevent learning: there is no more stress, instead there is calm, less noise, respect between people and animals... All this contributes to an environment which is conducive to the pupils' flourishing and being able to develop their own resources, and exhibit them outwardly in a safe and nurturing atmosphere.

The impact of the cats' role with students goes beyond our expectations. Michèle BOURTON wanted a school where students would feel "at home", happy and relaxed. Our structure which welcomes each child as a human being in its own right, also benefits from the masterful help of these felines who are always ready to make them laugh or comfort them.

Purring Therapy at school has never been tested anywhere else in the world than in our unique school and it deserves science to focus on its prodigious effects on students' academic and personal development. We are looking for scientists who might be interested in this project, to validate the effects of Purring Therapy at school.

Currently, we are developing a network of Candide Schools to create other schools, like ours, which may be able to offer this original schooling method to more children. Our pedagogy is legally protected and it can only be used within the strict framework of Candide's innovative

teaching method including Purring Therapy. It is important for animals to be protected. They must not be integrated in institutions where they would be mistreated, for example. Integrating an animal or several animals can only be done in an environment designed for them and in which there are few students, in order to respect their need for calm and freedom. We have created a chart and offer training to school directors who would like to set up an institution like ours. Here again, we are looking for people interested in this project in France or abroad.

References

Gauchet, J-Y. (2014). *Mon chat et moi, on se soigne*

Gauchet J-Y. (2018) Articles dans la revue *Effervesciences*

Zeenat Qureshi Stroke Research Center (2009). *Journal of vascular and Interventional Neurology*

Barlerin, L. (2018). *Chats : tout ce qu'ils essaient de nous dire*

Buy, S.-Durand, J-Y. (2016). *Chat, ce que le ronron révèle*, Géo

Busquets, G. (2018). *Cat's purr healing power*.

Available : <http://www.stepin2mygreenworld.com/>