

## OUR BEST QUALITY, DIVERSITY. THEORETICAL FRAMEWORK

In 1884 English researcher and scientist Francis Galton founded an anthropometric laboratory in London where he designed a variety of experimental situations that enabled him to measure sensorimotor skills. This laid the foundations for differential psychology, of which he is considered to be the father. His interest was focused around understanding human beings and their individual differences from a scientific perspective.

Today, this discipline aims to describe and explain individual differences in terms of inter-individual variability (variability between individuals), which in relation to education are centred around the study of personality and cognitive abilities, but also look at inter-group variability (variability between groups) and intra-individual variability (variability within individuals). These studies also show high predictability levels and are therefore widely used in the different applied fields of psychology as well as in education. At the end of the 20th century, neuroscience was focused on the study of mental processes involved in learning - memory, attention, motivation, executive functions and so on. Now in the 21st century, there is talk of neuro-education as a discipline that incorporates advances in neuroscience into education, by providing research on how the brain learns, and its implications in the classroom.

One of these research projects demonstrated the plasticity of the brain and is very closely related to the subject that we are covering in this teaching unit on diversity. This feature of the nervous system tells us that our brain is unique and that it will change throughout a person's lifetime through learning experiences.

Do I offer all my students rich and stimulating learning experiences? Are my curriculum enrichment activities aimed at all students, at all times? Do I take account of brain diversity, and do I take account of this diversity in my class planning, or do I have one single class plan which I subsequently adapt?

Neuroplasticity (plasticity of the brain) allows neurons to regenerate and form new synaptic connections. In inclusive education, this ability of the brain to change is related to the concept of having high levels of expectation for all students.

Do you tend towards homogeneity when creating groups, with one single curriculum? Do the students in the classroom do the same things at the same time and in the same way?

### ***How do current education standards take account of this diversity?***

It is now more than 30 years since, in 1985<sup>1</sup>, for the first time in Spain regulations were laid down governing the integration of students with disabilities into schools. This fact meant there was a *before* and an *after* in regard to educating students who were functionally diverse. Up until then, their only educational choices were special centres; whereas from that point onwards, they could go to ordinary schools.

In the intervening 30 years we have gone from *integrating* to *including*. We have gone from talking about special educational needs to talking about removing barriers. We have shifted from a deficit-based paradigm to one that is based on growth. During this time, we have gone from being governed by

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<sup>1</sup> Royal Decree 385/1985 on regulations for Special Education

the principle of integration to talking about the principle of *inclusion* - which implies a different educational model.

Did you know... under ONCE's inclusive education model, the school drop-out rate at the end of the Baccalaureate is just 9.6% compared to the European average of 11% and Spain's overall figure of 20%? (Report: Education and Training Monitor, 2016, European Commission).

**ONCE has been working in this area of academic and social inclusion with internationally recognised models of inclusive educational intervention.**

Up until the 1970s, the only educational option for students with blindness or severe visual impairment was schooling in special ONCE schools. Since the 1980s, education legislation has changed, as has society. There are now new educational approaches and initial attempts at integration. Specific Teams have been created to focus on the education of visually impaired people. ONCE schools have been converted into Educational Resource Centres. And Collaboration Agreements in the area of Educational Care for visually impaired students have been signed between ONCE and national and regional education authorities.

As a result, almost 99% of visually impaired students are now taught in regular schools, in their home town, district or city, and they follow the official school curriculum. In addition, these students receive supplementary support based on their specific needs in relation to visual impairment (braille teaching, new technologies, personal autonomy, guidance, mobility, study techniques, and so on) - all delivered by specialist professionals within the Specific Teams for educational care of the visually impaired.

Within Spain's autonomous regions, the educational care model for the visually impaired is inclusive and based on schooling at ordinary schools, with support provided by Specific Mobile Teams - as this is the model that best responds to the educational needs of this student segment

Current education legislation refers to diversity as a principle, not simply a means of meeting the needs of a few. It is embodied in two articles: Article 1e of Spain's Education Act<sup>2</sup>, which refers to "Flexibility in adapting education to the diversity of student skills, interests, expectations and needs, as well as changes seen among the student population and society"; and Article 4.3, which states "Focusing on diversity as a fundamental principle shall be adopted" and "when this diversity so requires, the appropriate organisational and curricular measures shall be adopted, in accordance with the provisions of this Act". Under the same regulations the principle is defined of inclusion as a basis for providing an educational response to all students.

What does this mean?

Since we humans are different, and no two people are alike, when we talk about diversity, we are referring to ALL students, and not a specific student segment with specific skills, interests, expectations and needs - because we are all different. Neuroscience tells us about the singularity of each brain and how our brains are unique and unrepeatable, and these differences will determine the way we learn, think and behave....

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<sup>2</sup> Unamended under Spain's Improving Educational Quality Act ("LOMCE")

Thus, the principle of paying attention to diversity should govern classroom practices, and inclusive responses should be available to all students at all times.

Miguel Angel Santos Guerra's fable "The Duck at School or the Value of Diversity"<sup>3</sup> encourages us to reflect on this idea of homogenisation.

Once upon a time, the animals in the forest decided to do something to tackle the problems of the new world. So they organised a school. They decided on a curriculum of activities that consisted of running, climbing, swimming and flying and, to make it easier to teach, all animals were enrolled in all subjects.

At the end of the year an eel - who was excellent at swimming and could also run, climb and fly a bit - scored the best on average and was given a medal for being the best student.

The duck was outstanding at swimming. In fact, he was even better than teacher. He scored OK in flying, but was behind in running. As he was a slow learner in running he had to stay behind school after hours and give up swimming so that he could practice running. These exercises continued until his membranous feet became worn, and consequently he became barely average at swimming. But "mediocre" was accepted at the school, so nobody worried about what was happening - except, of course, the duck.

The hare began the year as the most distinguished student in running, but suffered a nervous breakdown due to overwork in swimming. The squirrel was outstanding at climbing, until he became frustrated with flying lessons, where the teacher made him start from the ground, instead of from the top of the tree. In the end, she suffered cramps due to over-exertion, and then scored 6 in climbing and 4 in running.

The eagle was a problem student and received poor marks for behaviour. In climbing lessons he beat all the others in getting to the top of the tree, but he obstinately insisted on doing so in his own way.



### **So what does including diversity in my classroom mean?**

Inclusive education is a right. It means learning from difference. It means valuing diversity and having high expectations for all students, at all times. It means encouraging everyone's attendance, participation and progress. It involves promoting inclusion-related support in the classroom. It is based not on a paradigm of deficit - of what students *don't* know how to do - but rather, it focuses on their abilities. And, above all, it's about collaboration - because together we do things better.

### **What does it mean? Educational initiatives.**

It means promoting **dialogic learning** in the classroom - learning that is based equal relationships that comes from egalitarian dialogue. To achieve this, we need to provoke and encourage moments for dialogue, for reflection, in the classroom, opportunities for all students to present their ideas, opinions and arguments and where all are valid... where all students express themselves freely, listen, and appreciate one another and where everyone is enriched and learn from it. In putting together the Teaching Units, we have included an exercise for dialogic discussion groups<sup>4</sup>, based on this principle.

It means **changing the way we see things** and leaving behind labels and problems, and starting to see the person, their abilities, and everything they can contribute to the group. To work on this aspect, in all Teaching Units we offer group exercises and teamwork techniques.

It means **learning from difference** - because we are all different, because we all have something to contribute, because we all have our strengths, because we learn together. In putting together the Teaching Units, we encourage activities that promote group work and joint reflection on tasks.

To learn more about the education proposals made on this topic, you'll find supplementary information about interactive online training on our competition website.

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<sup>4</sup> You'll find a document containing guidelines for facilitation as part of the Teaching Unit materials.