BASE

Behavioral Assessment to Improve School Environment

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IO1 – Development of BASE web application

Erasmus+

PBIS at school

PBIS is a proactive approach that **schools** use to improve **school** safety and promote **positive behavior**. Students **learn** expected behaviors for each **school** setting through explicit instruction and opportunities to practice and receive feedback. Stepping in early can prevent more serious **behavior** problems.

- The background of PBIS is social learning and behavior analysis and in this perspective it is an **evidence-based strategy** in which the social modeling in different social scenarios play a foundamental role.

If a child ….. we can ….

If a child doesn't know how to read, we teach.
If a child doesn't know how to swim, we teach.
If a child doesn't know how to multiply, we teach.
If a child doesn't know how to drive, we teach.
If a child doesn't know how to behave, we… teach? …punish?
Why can't we finish the last sentence as automatically as we do the others?

Tom Herner (Nasde President, 1998)

Why is it so hard to think you can teach behaviour?

It’s happened so often that it’s almost a cliche. Students – whose entire purpose is to learn – are punished for not knowing how to behave, rather than being taught appropriate behavior.

Fortunately, attitudes toward misbehavior in the educational setting are changing. Today in the world there are a lot of schools (public and private) that apply the PBIS, adapted it in terms of school culture and climate. In each of these schools, there are students who struggle with appropriate behavior. **Teaching positive and appropriate behavior**, instead of punishing misbehavior**, is the main** theoretical principle of the BASE system (IO1).

A successful PBIS framework relies on a commitment from the entire staff, from administration to educators to support staff. It is most effective when adopted **schoolwide**.

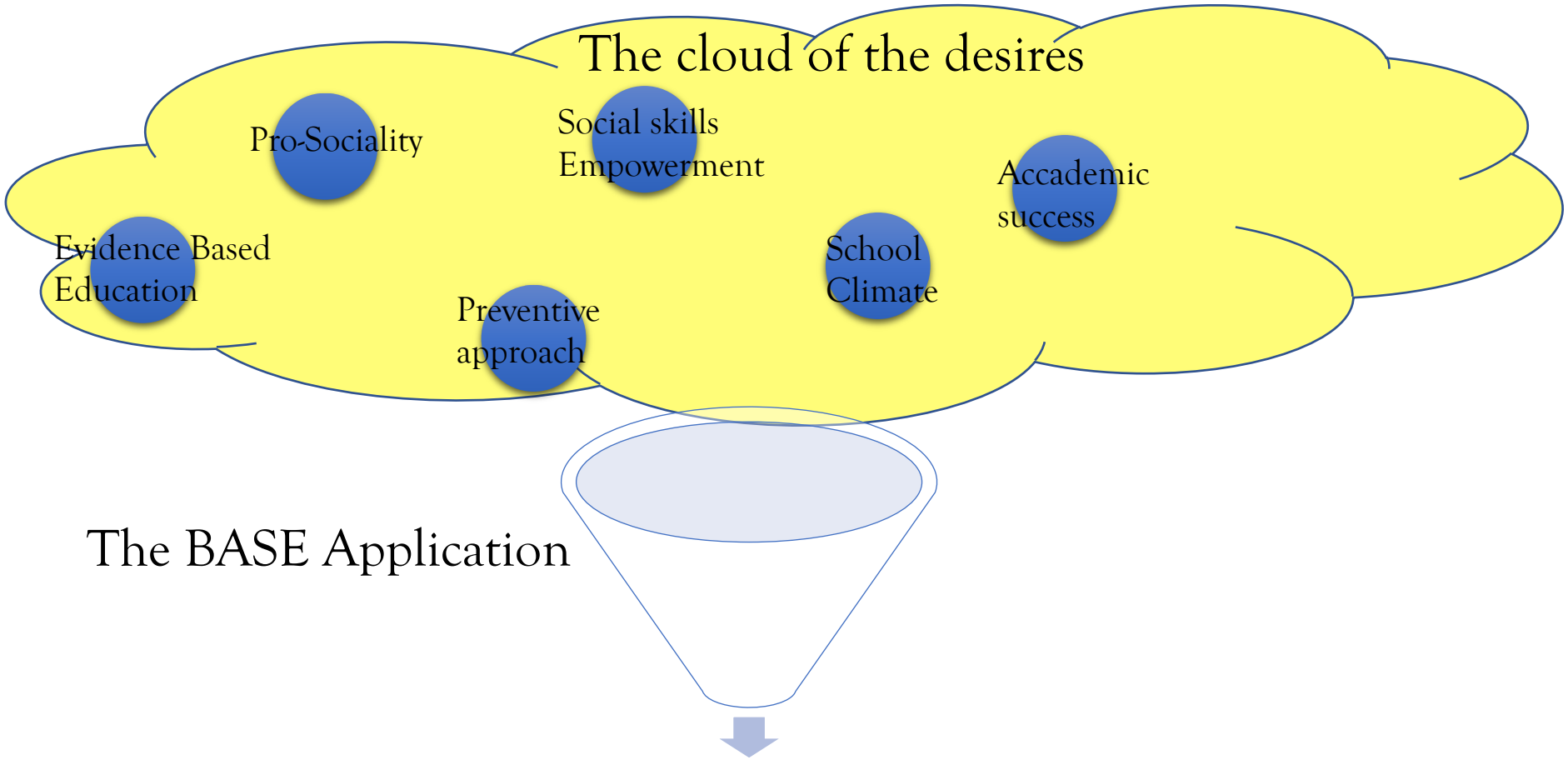
Benefits of Schoolwide PBIS

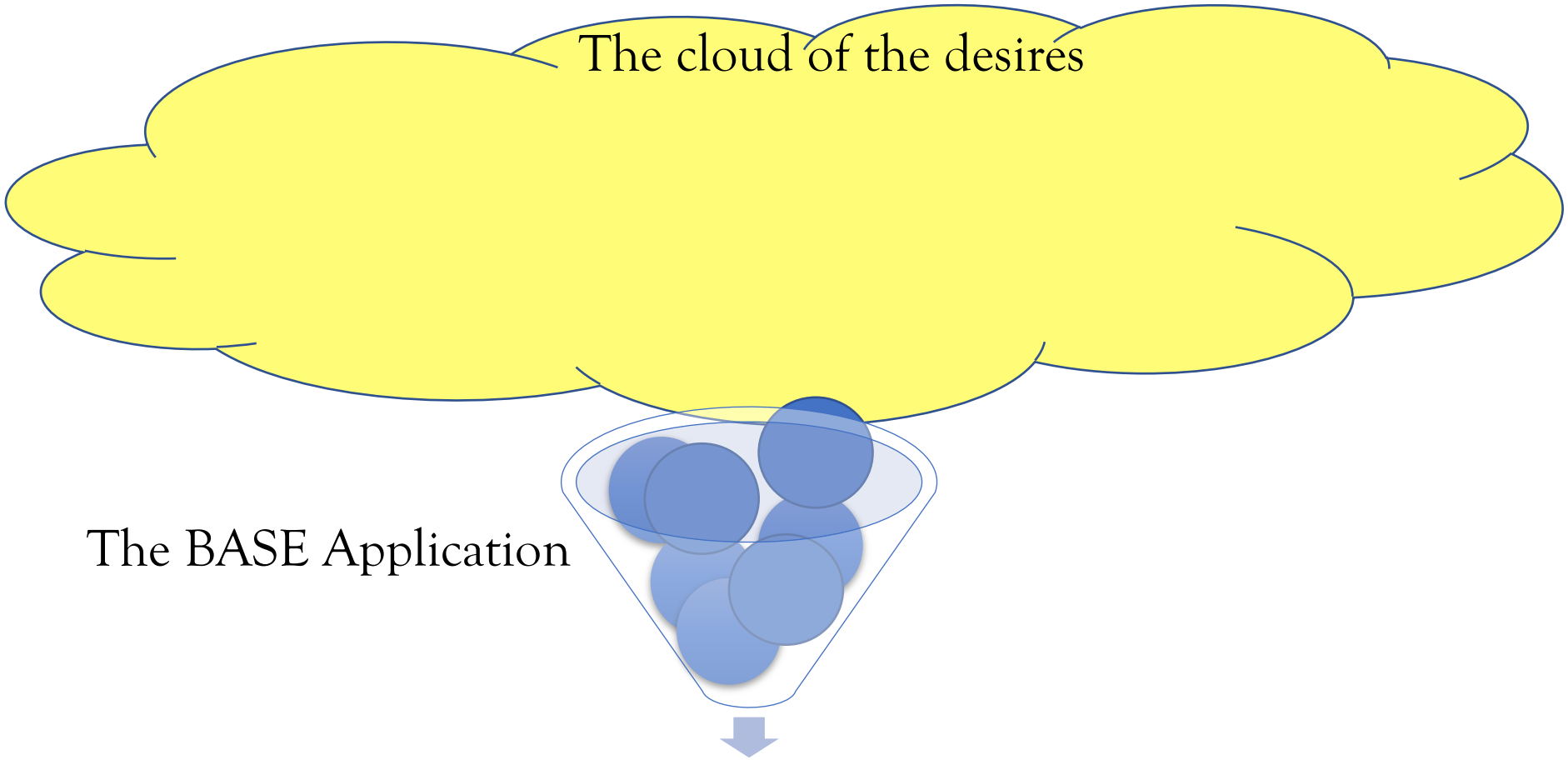
Adopting a PBIS framework schoolwide can have incredible benefits:

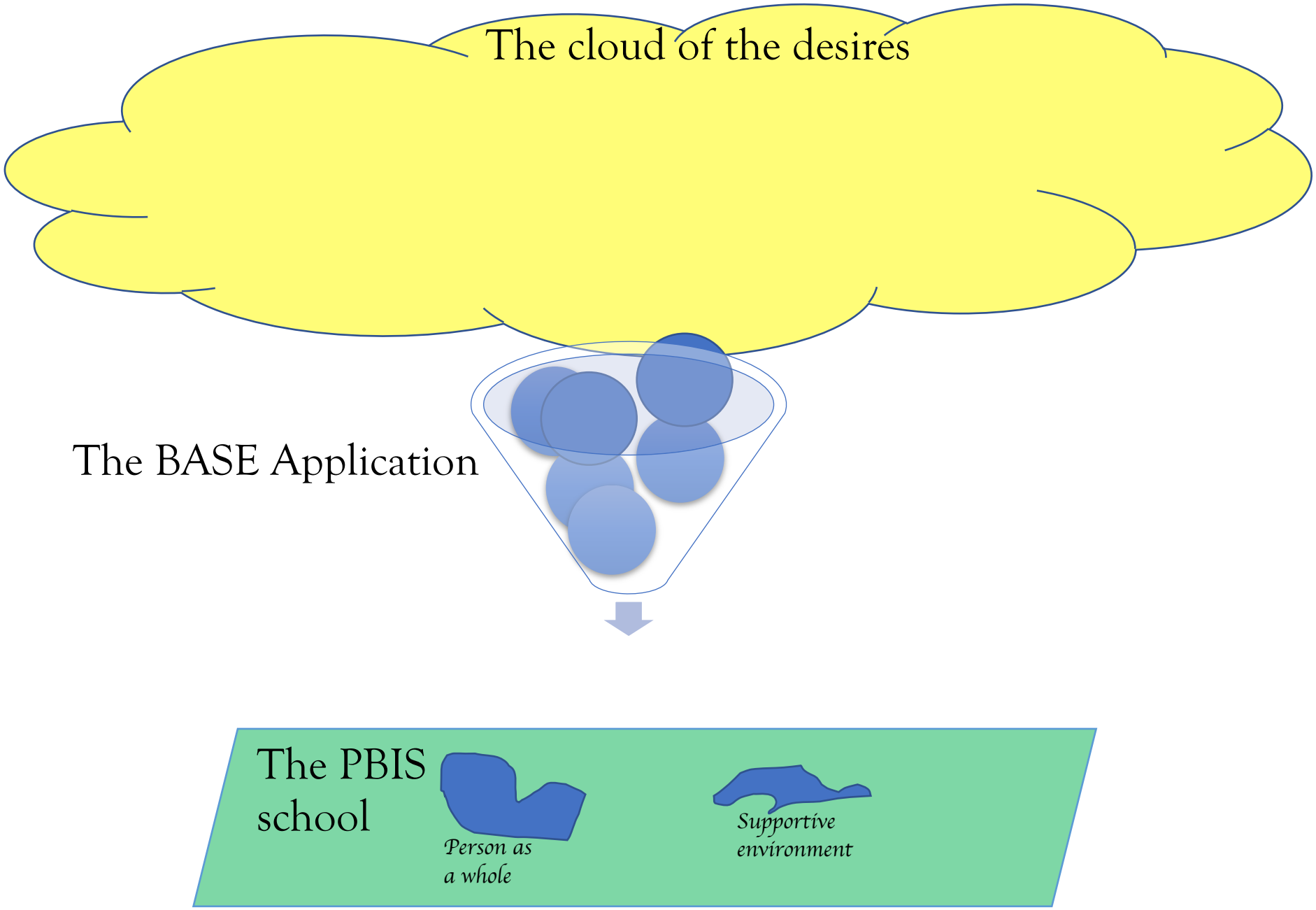
- Improves school culture
- Builds social skills
- Reduces office discipline referrals
- Reduces suspensions
- Increases instructional time
- Improves social and emotional development
- Improves school safety
- Increases student engagement
- Improves academic performance
- Increases family involvement
- Improves faculty retention
- Improves classroom management
- Adoption of a PBIS framework has the potential to create radical change in the climate of a struggling school. For educators who are seeking to reach and teach every student in their charge, PBIS makes it possible.

The Base app as a funnel to poured the PBIS

- Before the BASE app
  - School climate favorable to innovation and collaboration
  - A story of successes and failures
  - A pressure to cope behavioral problems
- Without BASE app
  - Hard individual work with non homogeneous results
  - A mix of positive and negative messagges/procedures
  - A widespread sense of frustration
- The BASE app work
  - To help to transform desires in results
  - To construct competences and collaborations
  - To invest the school as whole in a innovative vision
  - To guide toward a quasi-experimental approach to behaviors and interventions

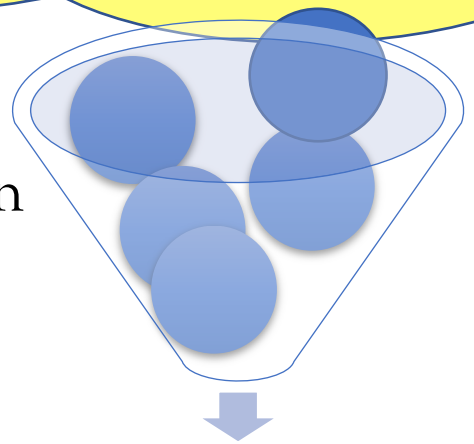

The cloud of the desires
Pro-Sociality
Social skills
Empowerment
Accademic
success
Evidence Based
Education
School
Climate
Preventive
approach
The BASE Application
The school


The cloud of the desires
The BASE Application
The PBIS school
Person as a whole

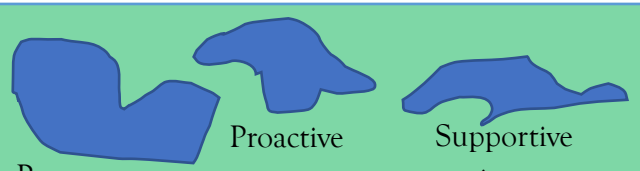

The cloud of the desires
The BASE Application
The PBIS school
Person as a whole
Supportive environment

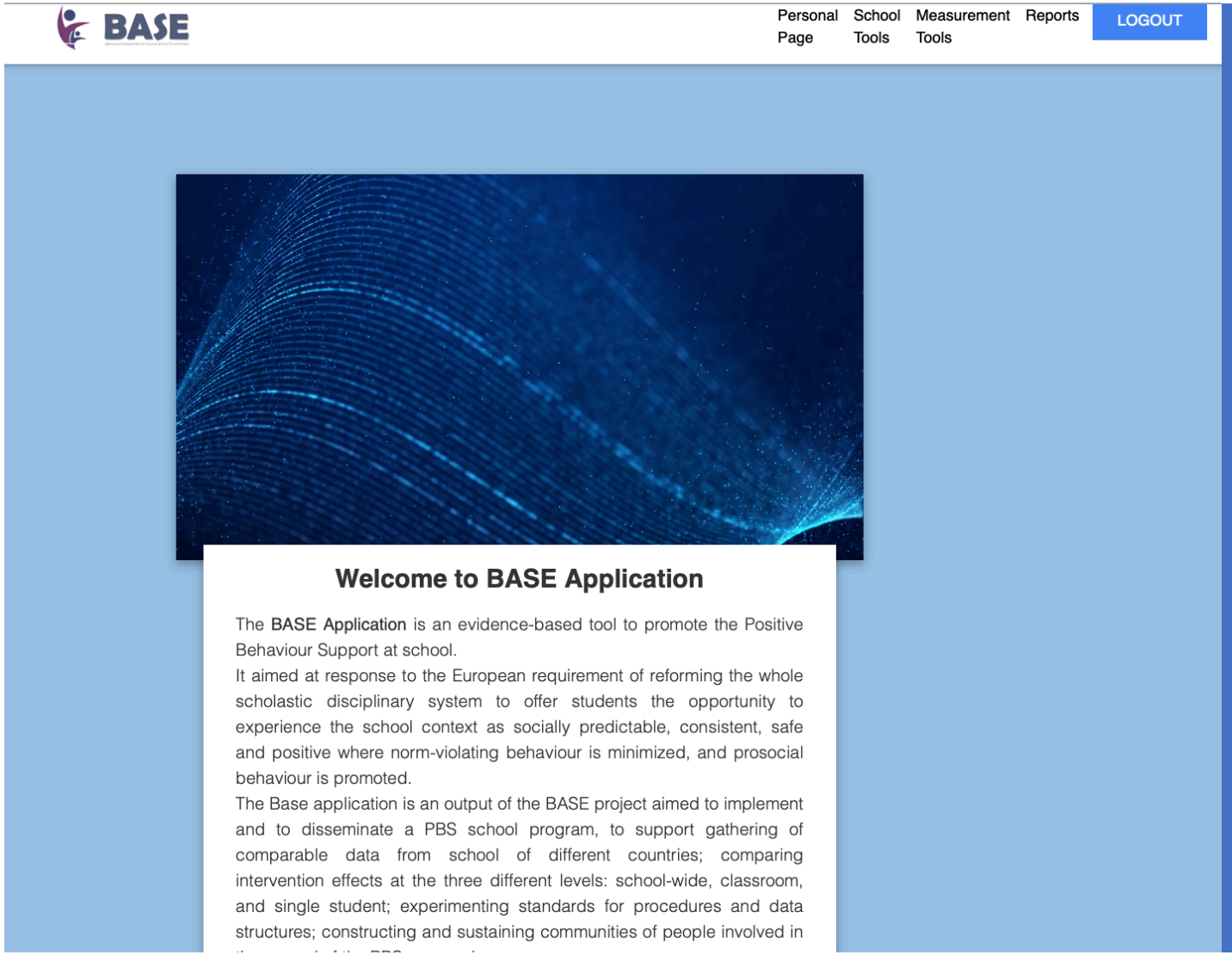
The cloud of the desires

The BASE Application



The PBIS school





The Base application

- https://app.baseproj.eu

User guide: https://www.baseproj.eu/outputs/base-web-application.html

The school plan for using the BASE System

1. School registration in the BASE system.

2. school expectation matrix uploading.

3. school minor and major problems uploading.

4. school 5 "student codes" creation using the “Access Data Generation” tool

5. ABC and Frequency number creation for observation.

6. Definition of target behavior and selection of the previous measurement tool created for the observation process

7. Baseline observation phase.

9. Behavioural function identification and plan of intervention*

10. intervention observation phase*

11. Feedback from the BASE system*

12. Each school prepares the document of the Case Study with the description of the case and the results of intervention to be inserted in the BASE repository.

13. 28-29 May 2020: Final presentation of the school results to the final conference in Netherlands.

*Covid-19 affect

Summary of activities with BASE

- All schools are registered in the base system
- All schools uploaded the expectation matrix
- All schools uploaded major and minor behaviours
- All school used the BASE system for defining measurement tools
- All school defined target behaviour to observe
- All schools completed the Baseline phase
- The Portuguese school completed the 5 cases study with the Intervention. The BASE system provided the effect size of intervention.

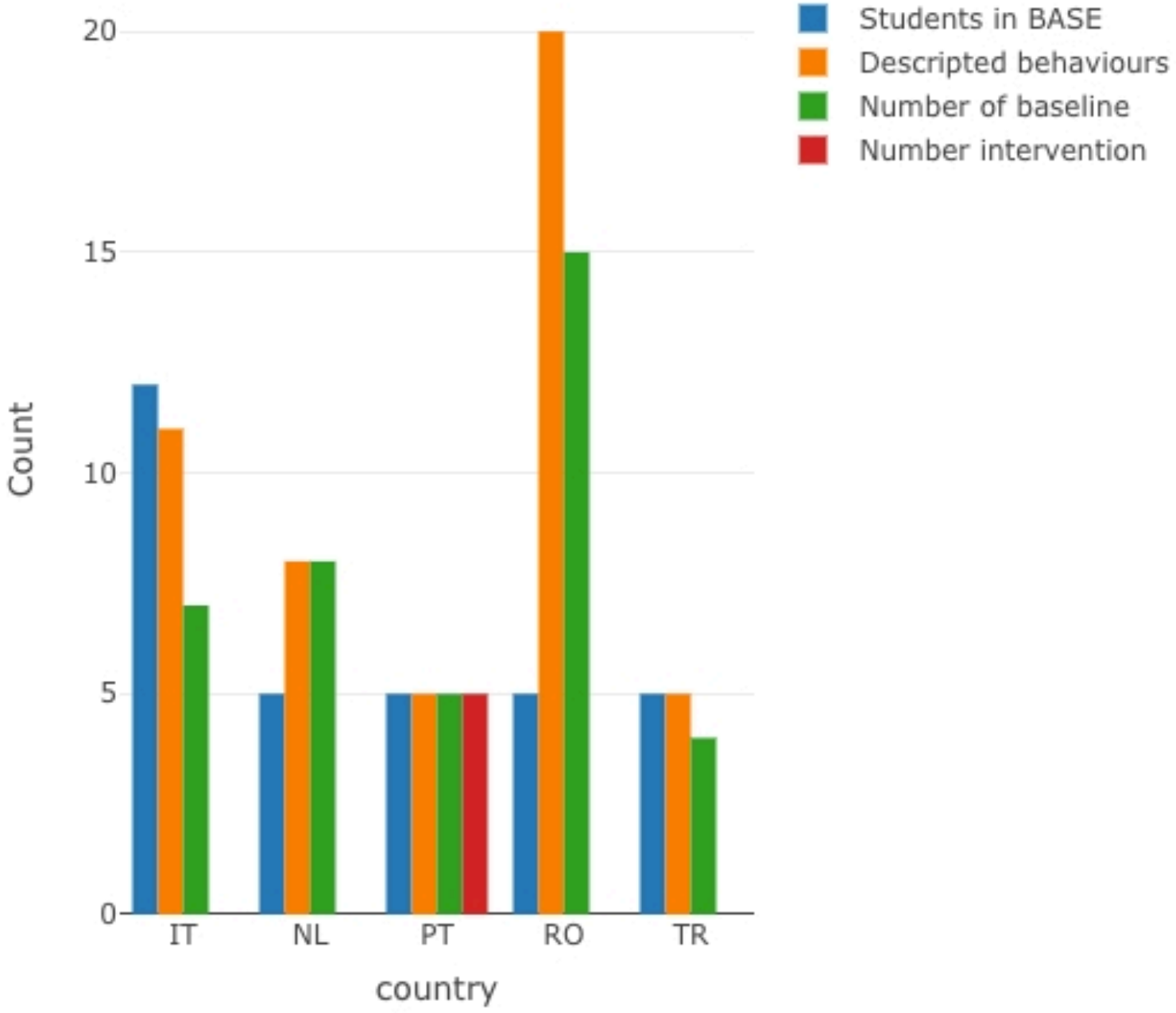
Values and Locations of BASE Expectation Matrixs (Word cloud)

BASE system data collection

	# occurrence
Values	13
Location	12
Positive behaviors	98
Minor Behaviour	30
Major behaviour	20
Students	32

	# occurrence
Target Behaviour operational description	49
Baseline completed	39 (80%)
Mean observation session number	6
built measuring tools	5
Completed case study with statistical feedback	5

Use of the BASE system for Single-case design



Lessons learned

To clarify the difference between “measure design” and “measure use”

To simplify the procedure to connect a measurement tools to a target behaviour to be observed.

To improve teachers’ knowledge about how to create an experimental design for data collection (Evidence Based Education (EBE)

To improve teachers’ glossary about specific terms used in the system

To simplify the user interface for facilitate the interaction of the user with the system

Thank you for your attention and the contribute of all schools involved!