

Chances and obstacles

# Dynamic SoundField in Regular Schools



Chances and obstacles

## Dynamic SoundField in Regular Schools

Attempts to implement wireless speech-transmission in regular schools may end in both ways.



My thesis:  
„Dynamic SoundField“  
is a key instrument to end  
more frequently  
successful.

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Please be indulgent to  
the old man...

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early 2018

early 2018, after 3 years  
of trying to implement  
„Dynamic SoundFiled in  
regular schools...

... and in early 2019!



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**Options of Hearing  
Technologies are  
fascinating**



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## Dynamic SoundField in Regular Schools

Options of Hearing  
Technologies are  
fascinating



## So why using FM-Systems and Dynamic SoundField?

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Because noise, distance and reverberation-time interfere speech comprehension

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FM–Equipment is well  
known in pedaudiology ...



... and used since decades

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And fortunately it  
is changing



... to much more  
options



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So why do many of our young patients do not want to use our fine equipment?

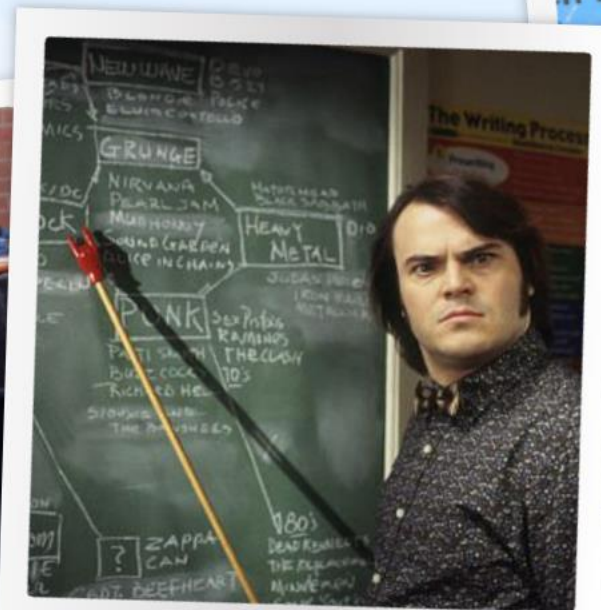


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Because success  
depends on people ...



...and circumstances.

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As long as education looked like this, everything was fine for the student with hearing aids.

Perfectly connected with „his master´s voice“

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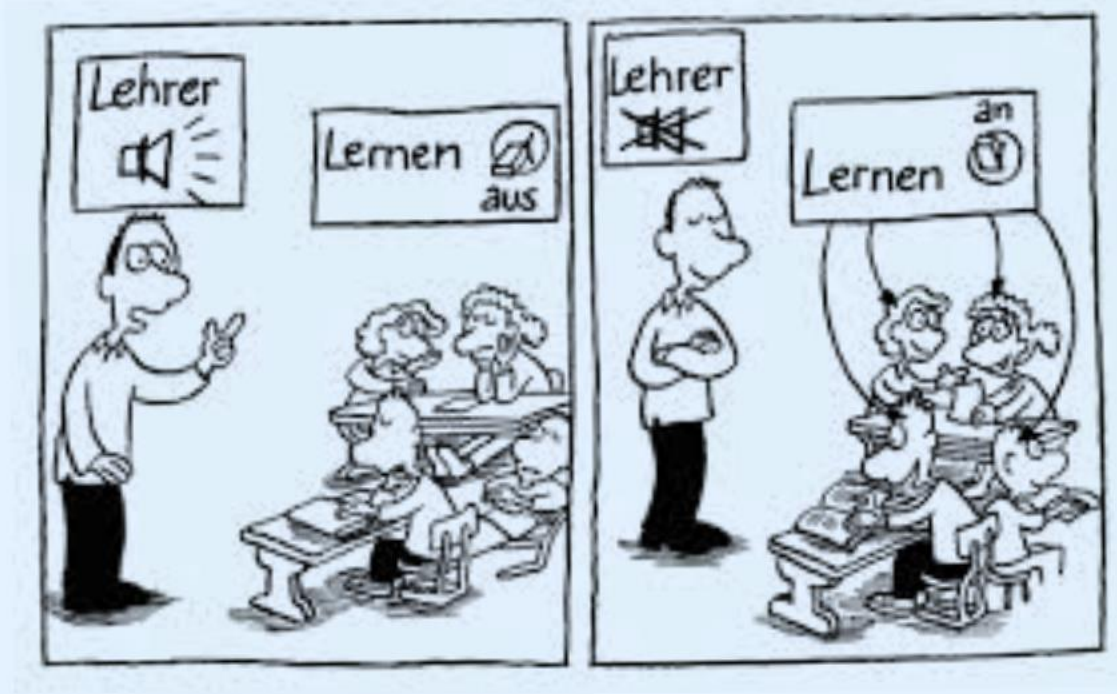
After the „PISA-shock“ of 2000 educational concepts in Germany changed...

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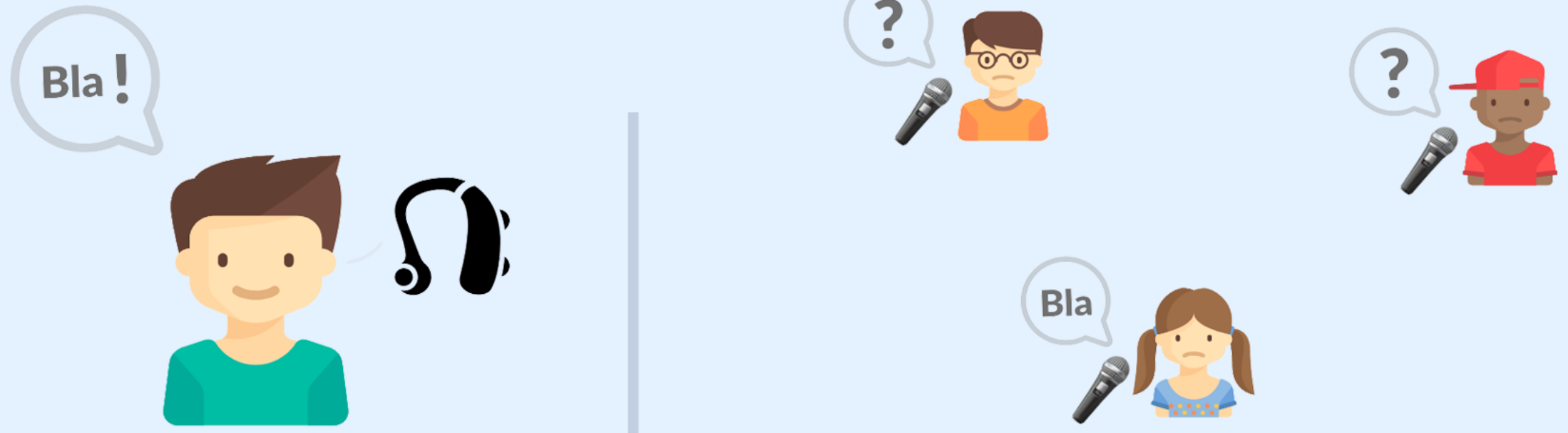
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... from „teacher-centered“ education to „dialogic learning-centered“ education.



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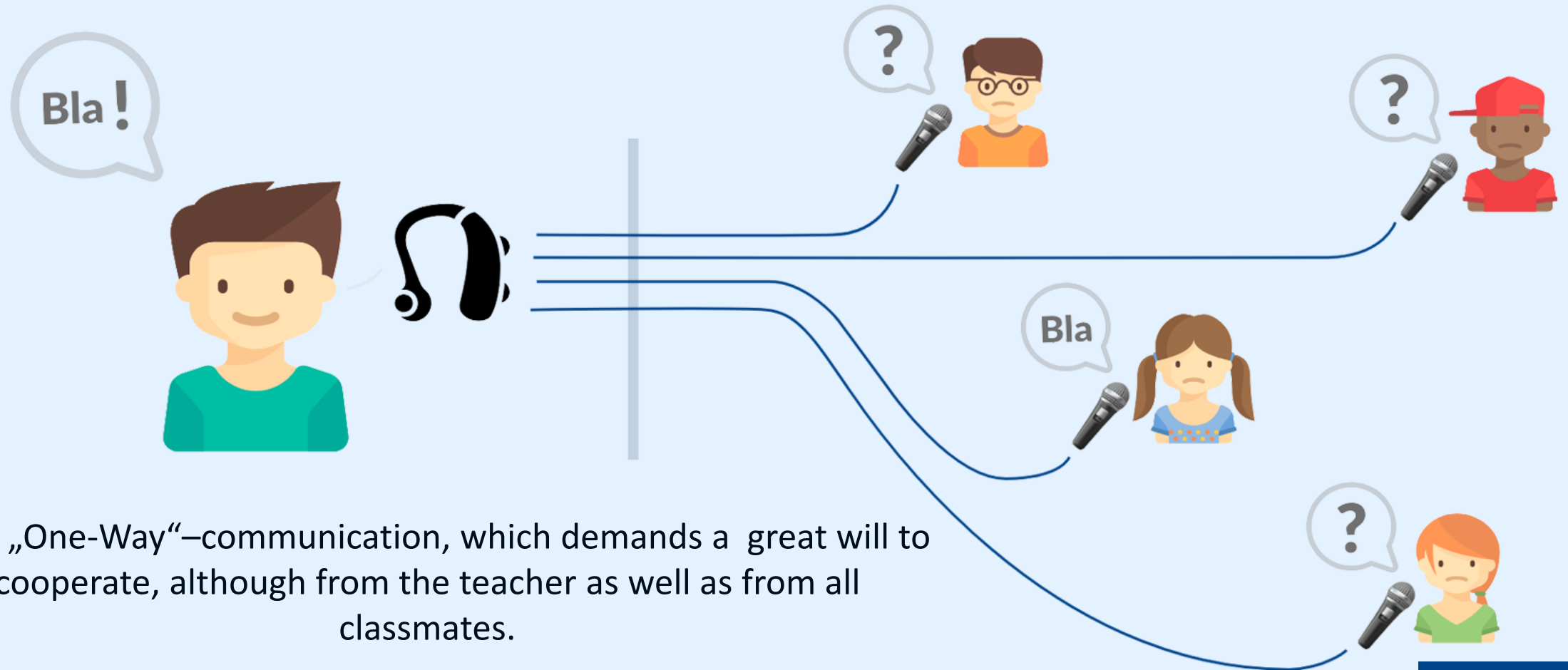


Using „MultiTalker“-Mics in class, without hearing any sound, is an abstract and somehow senseless action for children (and even adults)

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It's a „One-Way“-communication, which demands a great will to cooperate, although from the teacher as well as from all classmates.

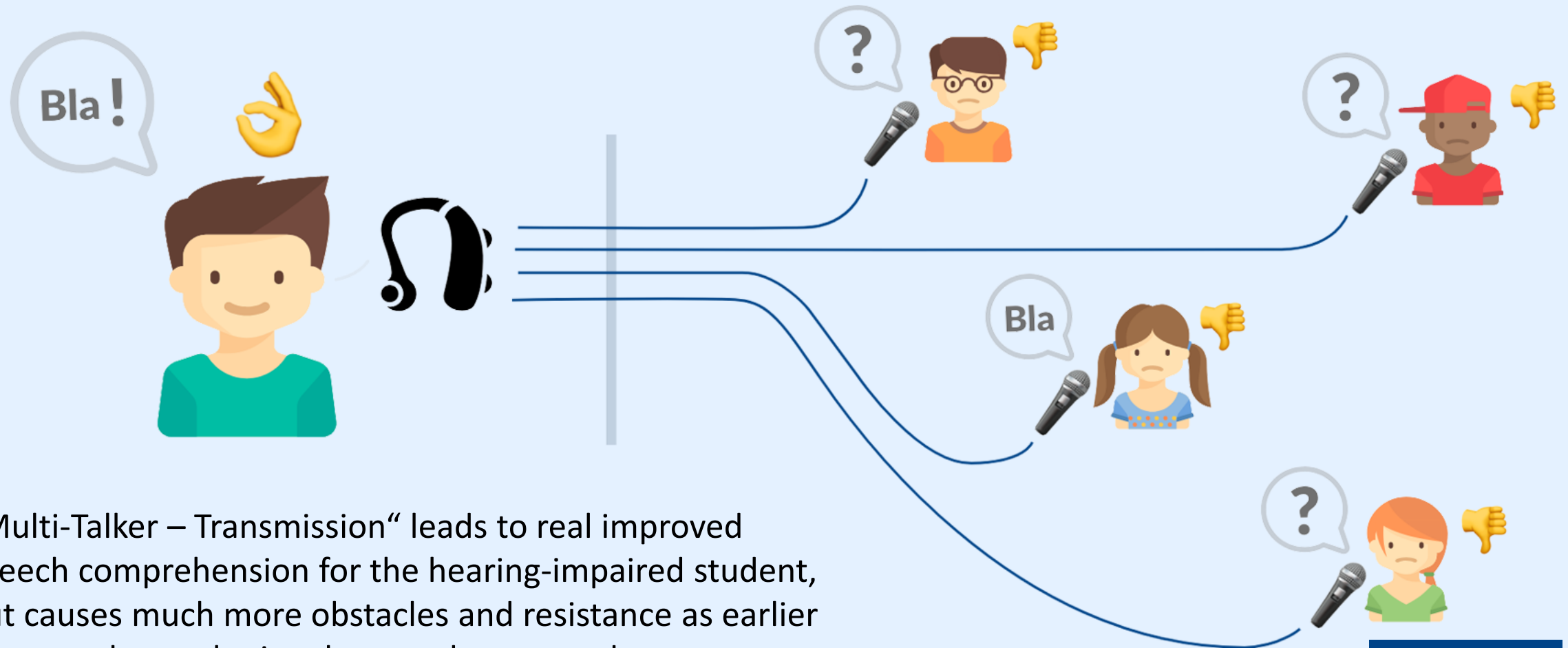
Willing or not, our student becomes „the special one“

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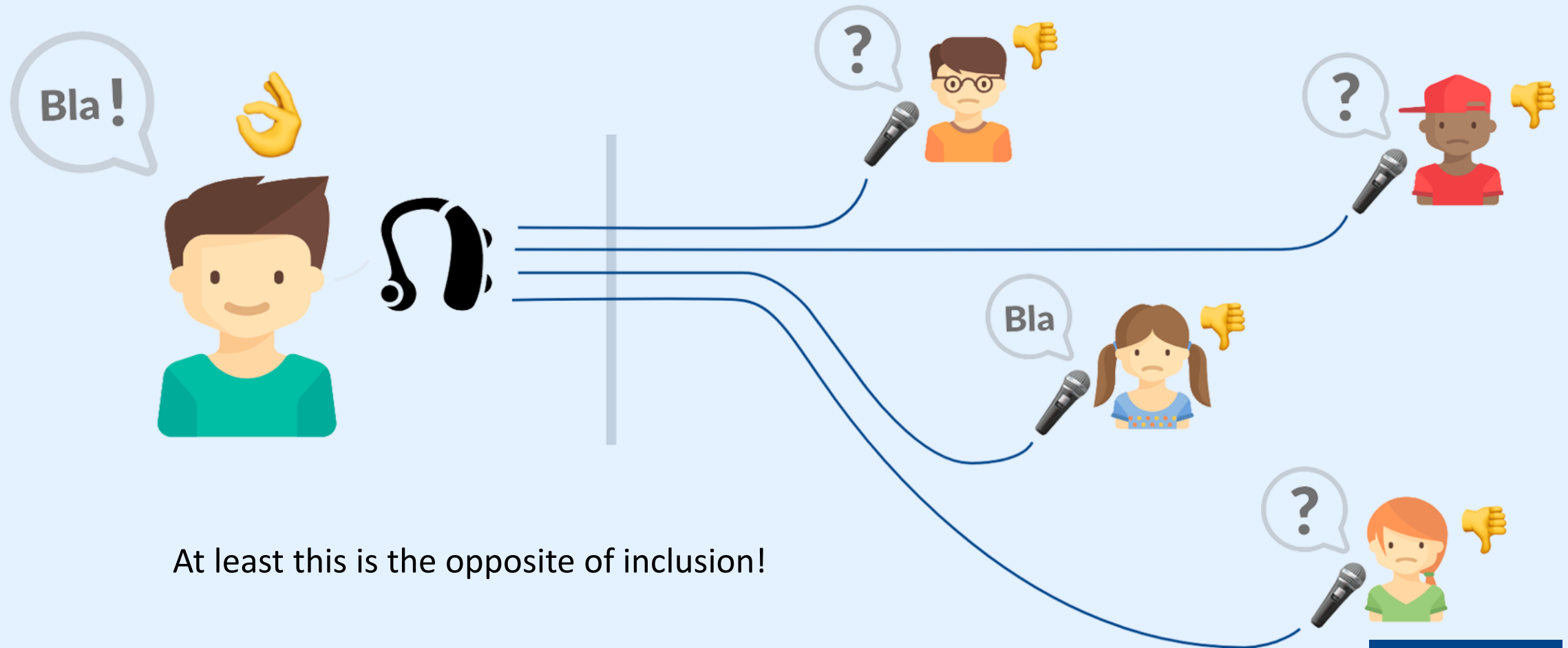


„Multi-Talker – Transmission“ leads to real improved speech comprehension for the hearing-impaired student, but causes much more obstacles and resistance as earlier known, when only singular „teacher-to-student – transmission“ was used.

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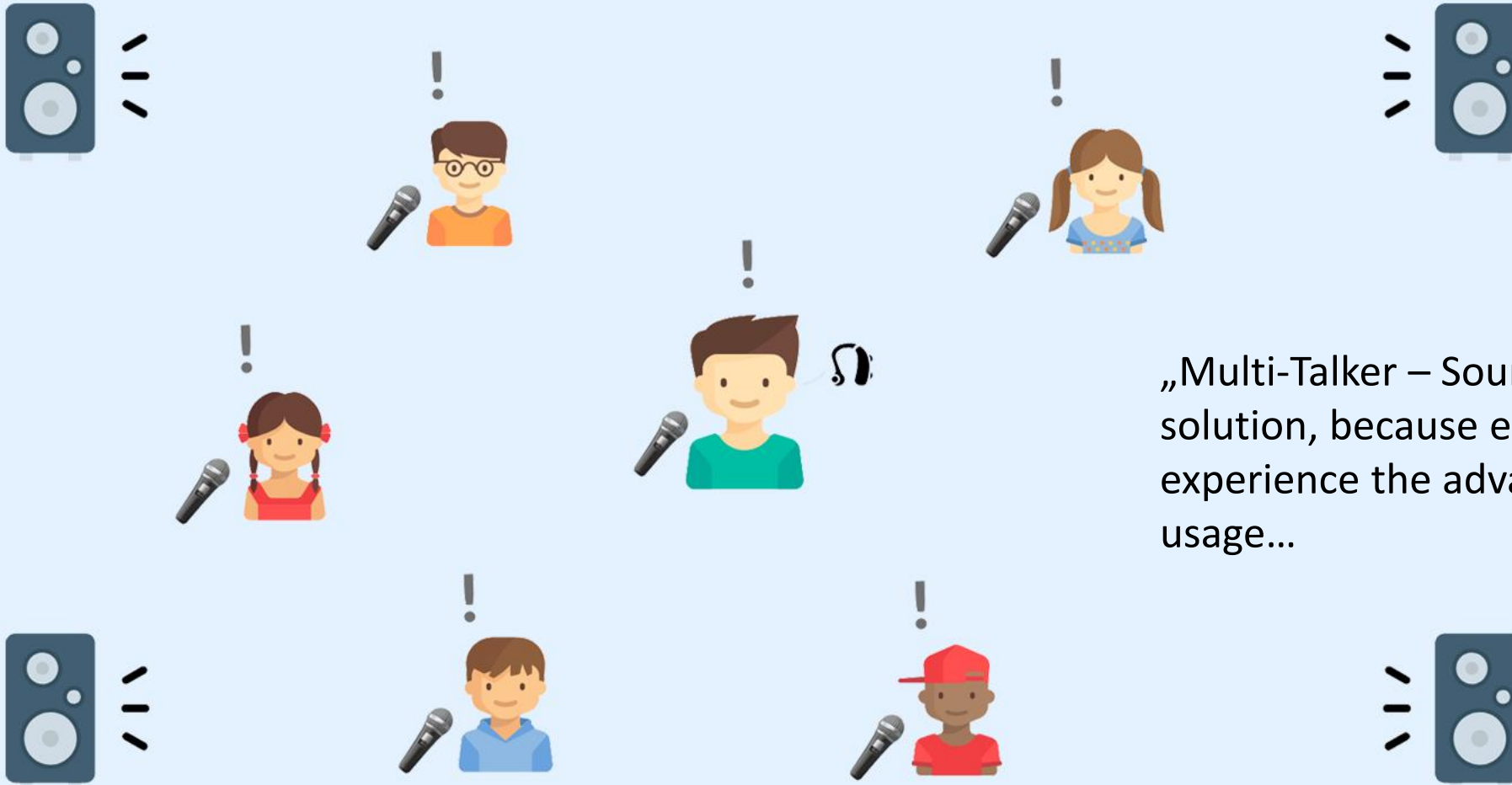


At least this is the opposite of inclusion!

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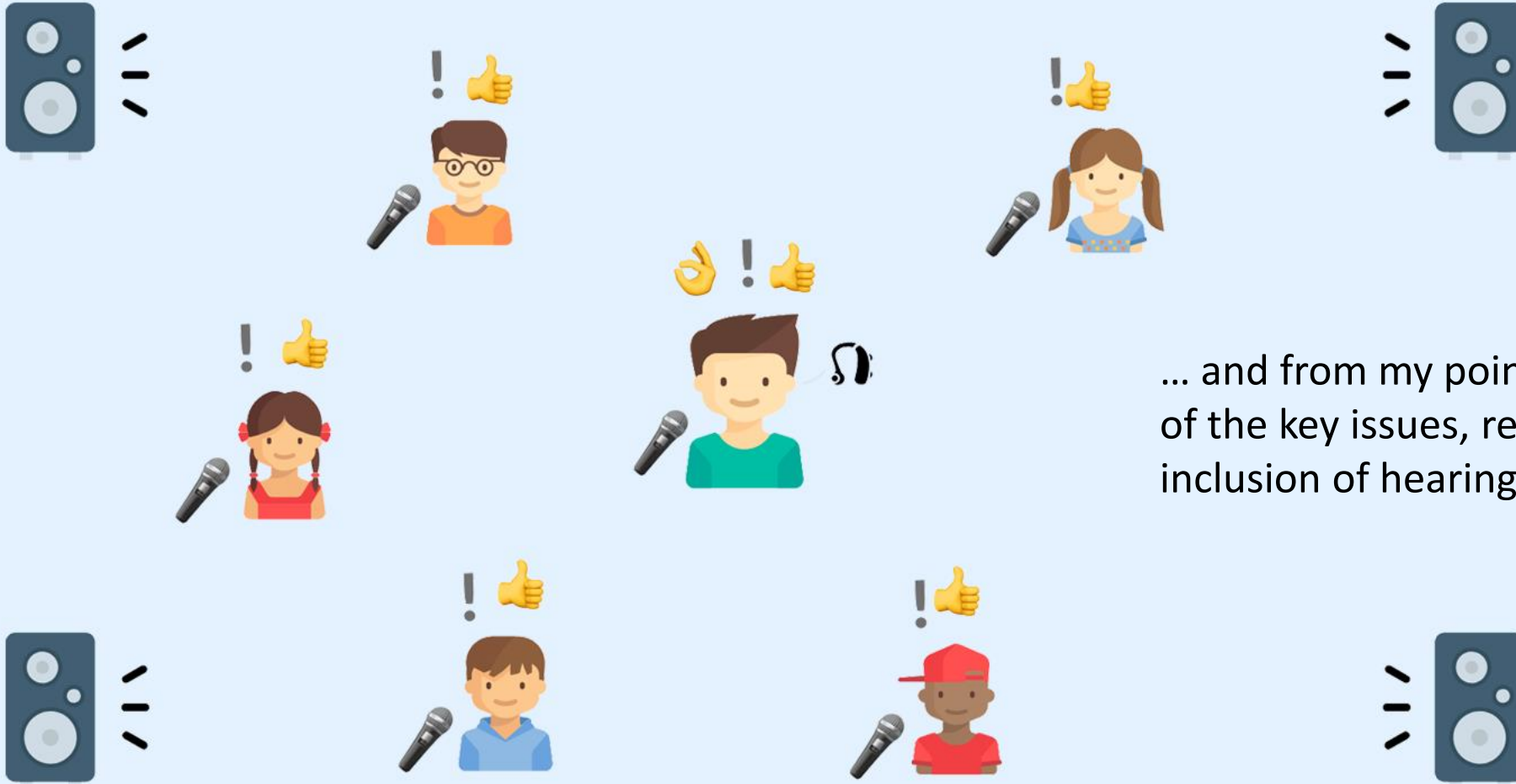


„Multi-Talker – SoundField could be a solution, because everyone in class is able to experience the advantage of microphone usage...

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... and from my point of view it might be one of the key issues, regarding to succesful inclusion of hearing-impaired students.

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### Case Examples



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Juna

born 2009

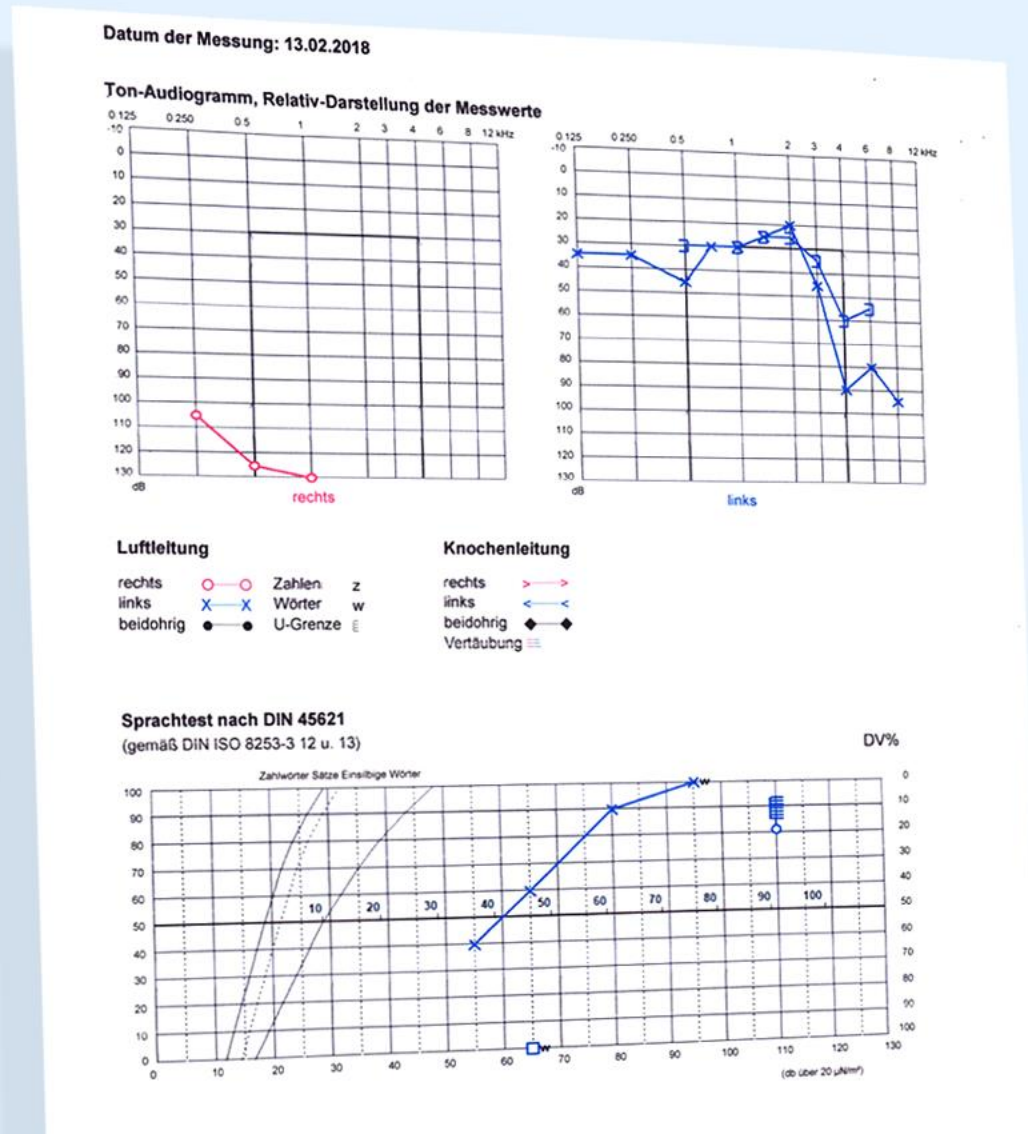
Here in 2012 at the age of 2

- Relapsing polychondritis, diagnosed at 6th month
- Deafness on the right ear
- Progredient HF-hearing-loss on the left ear

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- Her audiogram, meanwhile stable since 2013
- First usage of Roger -transmission at the age of 4
- Equipment has been intensively used in speech therapy and Kindergarden
- Had good impact on Juna´s speech development.

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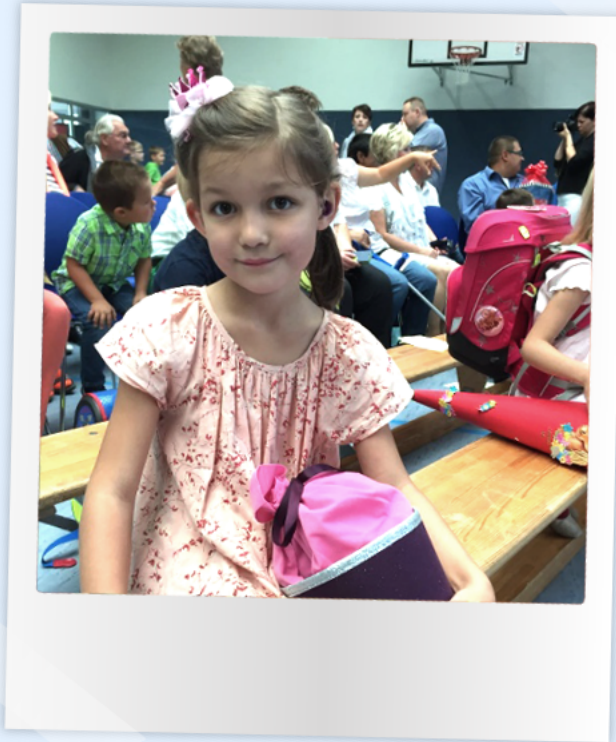
- Additional MT-Mic at 5 (last year at Kindergarden)
- to improve her understanding in chair circle
- to condition her in group usage
- complained early about „*noise and nonsense that other kids do with the mic*“





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- Early in first year at primary school Juna refused Roger equipment
- same reasons as already mentioned in Kindergarden.
- „Forgot“ to carry Roger to school
- Had a variety of strategies to avoid using Roger

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- Juna became more and more isolated in class
- had significant problems to follow the lessons
- „special school“ - option has been dicussed, but strongly refused by parents



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- In 2. year of primary school intensive intervention of „special pedagogues service“
- Using only one MT-mic deferred the flow of every lesson.
- Classmates were very cooperative to Juna, but situation became annoying for the whole class.

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- In 2018 two long term trials of a complete SoundField including:
- 2 TouchscreenMics
- 6 PassAround MT-Mics for the class of 26 children
- took only a few days until the whole class, including the teachers, felt very much comfortable with the new situation.

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Class uses SoundField since December 2018;  
statements of class in April 2019:

- Speaking into a Mic is (now) normal
- We hear each other better
- Every table group has Mic-service
- *„I like that we do not talk across each other any more“*
- *„Before „Alexa“\* came I did not now how loud to speak into the Mic to let Juna understand; now I know.“*

\* the class gave the name „Alexa“ to SF – Speaker



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Statements of teacher (fem) in April 2019:

- *To be honest, I realized the whole dimension of Juna's problems only in the last few months, as her participation in class changed completely*
- *In a „reading-night“ with two devided groups, I used the SF only in the „Juna-group“ and realized the different impact for all kids and for myself*
- *The shy and silent ones in class have great benefit from SF*



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Harun

born 2008

Here in 2019 at the age of 10; 3rd year at primary school

- Binaural deafness diagnosed at 13 months
- CI – surgery right at 22 months
- CI - surgery left at 26 months
- Bilingual education German / Kurdish

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- „Lost“ his Roger – Receivers several times
- Was a quiet and shy boy in class
- Did his „still work“ fine
- Did not participate in communicative education



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## **Dynamic SoundField in Regular Schools**

Let us visit Harun's class,  
to see how SoundField can work

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**vivitek**  
Wild Color, Vivid Life

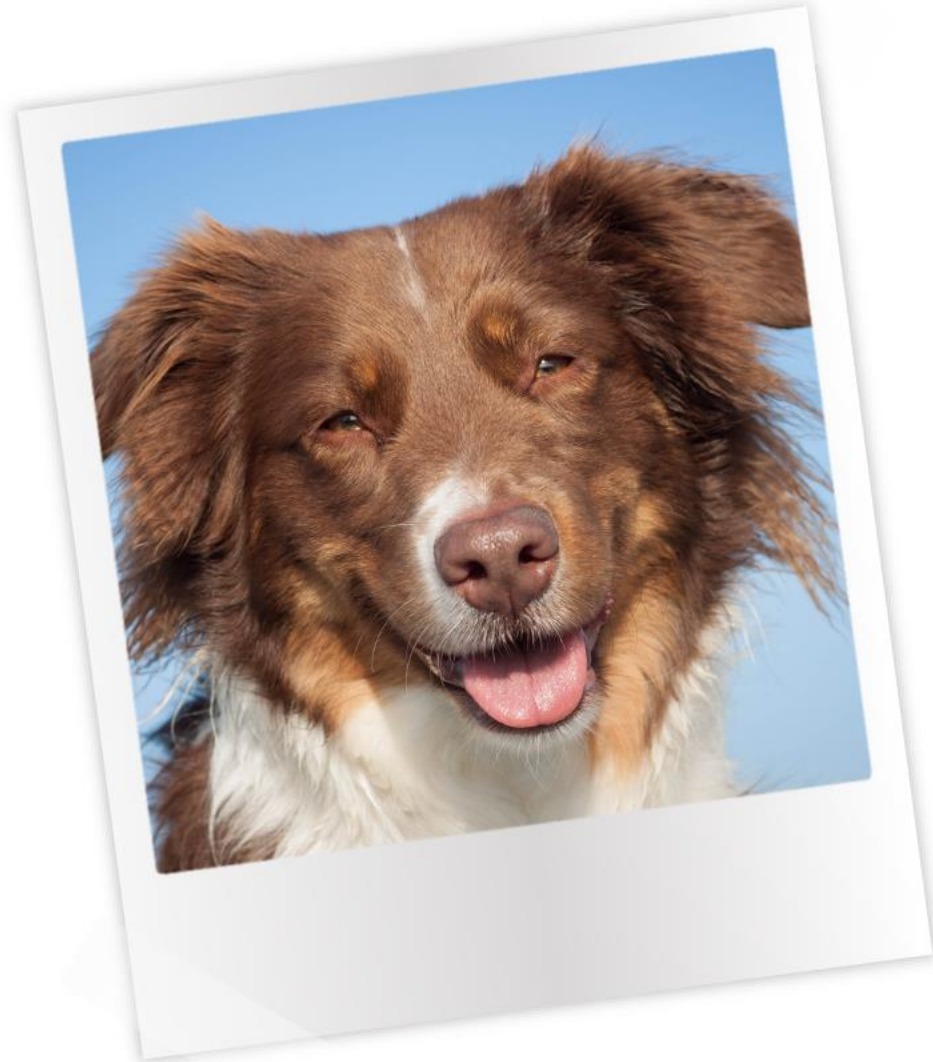
90 S. 42  
S. 43 Nr. 1-2  
→ pro Satz 2. und 3. Lösung  
4B  
S. 46 Nr. 3  
S. 47 Nr. 1  
S. 48 Nr. 3  
Wild 2. AM

Testtest  
1  
2  
3  
4  
AB lesen selbst  
24. Montag 11.10  
Wild 2. AM

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Thank you  
for your attention

