

0:02 / 17:20

Transcript: supporting individual digital learning paths

00:00

The Oscar Paret school in Freiberg/Neckar is a typical community school

00:03

The teacher greets the class 9d

00:17

to the PEARL-session - the personal learning time – it is

00:20

an open learning time for students during classroom work

00:23

where students work

00:25

self-organized.

00:28

They work on different individual tasks at their own

00:30

pace – they take up responsibility for their individual learning,

00:32

make themselves competent

00:35

recognize that

00:37

they „can do“ something – this is the expression used

00:40

in the digital competence grids in open learning phases

00:43

which are being planned and documented using

00:46

DAKORA – the app which can be used for all school types.

00:50

Dakora stands for “working with digital competence grids”.

00:53

For this, students collect their tablets this morning

00:56

to work with the app

00:58

Dakora at their learning space.

01:01

Hannah is one of the students. Using Dakora

01:04

she finds an overview of

01:05

„when do I have to do what and how?“

01:08

Hannah: „I am at the starting page of Dakora and now I click on the

01:11

weekly schedule and then I have to

01:15

choose which subject I want to work with

01:17

and today I choose Math

01:18

and I see

01:21

all tasks in the left menu

01:23

that I can work on and

01:24

for planning a task I have to

01:27

click on it and drag it to the weekly schedule.

01:29

Then I can define the end time of the task -

01:31

for how long I would like to work on the task.

01:32

I can do the same thing again with a second task.

01:35

To work on the task itself

01:39

I have to open it by

01:40

selecting the task and holding it – this way the task is being opened

01:43

and I can see additional information –

01:45

for example the reference to the

01:47
school book for this task”.

01:49
In just a few steps Hannah sees

01:51
which tasks the teacher has

01:53
assigned to her and which

01:56
materials she should work on.

01:58
Today it is a task from a book. Hannah can see

02:03
the competences that are associated with the task.

02:07
Hannah fetches the book – it is about Pythagora’s theorem.

02:11
The task is not quite easy.

02:14
Hannah: „Luca – can you help me please?“ Besides the teacher today Luca is

02:24
the math expert in the

02:26
open learning phase. Hannah uses his help

02:29
and receives an explanation about how to solve the task.

02:34
Hannah tears out the solution from the scrapbook and

02:36
puts it in the post box of the teacher.

02:38
This is just one form of turning in a solution.

02:40
With Dakora all possibilities are opened and made available -

02:43
a complete digital solution is also possible

2:45
by uploading the results in a file format using the app.

02:48
Now Hannah is giving feedback to her teacher Mrs. Sabine Sommer

02:51
using the app Dakora.

02:53
Hannah self-assesses herself.

02:57
Choosing the smiley in the middle signalizes

02:59
that without help she would not have been able to solve the problem.

03:02
In the text field she gives the reflected

03:04
feedback „*Trying to solve the task I had*

03:07
a few problems.

03:08
Thanks to Lukas I was able to understand everything

03:10
at the end.“

03:14
[Music]

03:15
Submit solution and inform teacher

03:19
A little while later, independent of

03:22
the feedback given in class the

03:24
teacher gives more detailed feedback using Dakora,

03:27
independent of place and time.

03:31
Sabine Sommer connects the dots and

03:34
gets an overall idea of the performance of her students.

03:36
Notifications in Dakora

03:39
can be accessed via the notification board and

03:41
she specifically aims at the students

03:43
which have signalized a problem in their feedback.

03:45
Hannah is one of them. She clicks on the student

03:48
and reads her self-assessment. Now

03:51
she knows that without help she would not have been able to solve the problem.

03:54
Mrs. Sommer reviews the solution process

03:56
and gives feedback related to the task:

03:59
at difficulty level „M“ (medium) the objective was

04:01
predominantly reached.

04:04
The teacher can give this feedback in her Dakora version individually

04:07
to the student.

04:07
She writes to Hannah: *Dear Hannah*

04:10
in order to improve your objective evidence

04:11
I will put some more tasks in

04:14
your weekly schedule.

04:15
Cheers, Mrs. Sommer

04:18
[Music]

04:21
Now Hannah opens her Dakora

04:23
app and sees the comments and

04:25
assessments of her teacher. Hannah now knows

04:28
her level. Accessing her weekly schedule

04:32
she drags an additional task to work on

04:34
to Thursday of the week.

04:35
She could also choose further tasks

04:37
by herself.

04:39
„There is this advantage that the teacher

04:41
can better understand specifically on what

04:43
I have worked on.

04:46
It is of a great advantage that I don't have to wait

04:48
let's say for a week for this feedback.

04:50
I get this information right away while I am

04:52
still in the topic and can continue

04:54
working on this quickly.

04:56
This alone

04:59
offers me a good overview.

05:02
There are no loose sheets in the file folder.

05:05
Something gets lost easily there – it is a lot better

05:06
having it in a digital form and everything

05:09
can also be accessed from home as well.

05:11
I don't have to carry many file folders back home.”

05:12
Hannah talks with her

05:15
teacher after she has solved the

05:17
additional task given.

05:19
Counselling: „Where did you have the problems with Pythagora's theorem?" Hannah describes her current situation.
05:31
Dakora gives this information to both students and teachers
05:34
in a differentiated way for counselling.
05:35
Sabine Sommer can now
05:39
pin Hannahs child-competences down.
05:41
Sommer: "No need to give up and I can now feel that you are on the right way. You are secure and want to take the next step.
05:53
Based upon our talks now I am
05:56
very confident that I have
05:58
assessed you at the right level."
06:08
and this is done with Dakora.
06:10
Sabine Sommer is preparing the next
06:12
lessons.
06:13
She selects Hannahs competences grid on the tablet
06:16
in the subject Math from the left navigation.
06:19
On the left: the individual competence fields. Space and form
06:22
is today's topic. On the horizontal navigation
06:25
the individual learning progress
06:27
and competences can be seen.
06:28
Each competence consists of several child competences
06:31
which are linked to tasks.
06:34
Take this as an example:
06:35
„Using Pythagora's theorem I can check
06:37
if triangles are rectangular"
06:40
Sabine Sommer now evaluates the child competence:
06:44
For the three difficulty levels
06:47
she chooses the middle one
06:49
selects „M"
06:50
and marks the child competence as
06:53
fully achieved.
06:55
The teacher can review and decide:
06:58
Has the competence been reached?
07:01
She draws a mental picture: first the help from
07:03
Lukas, then the learning evidence and
07:06
the additional task solved and counselling.
07:08
Dakora helps Sabine Sommer
07:12
gain a pedagogical comprehensive assessment.
07:14
She selects the competence grid
07:18
then the student.
07:23
In the top line the competence that is being worked on is displayed.
07:26
[Music]
07:30
Sabine Sommer selects the difficulty level and

07:32
enters the grade: 2.
07:36
[Music]
07:43
Parents' conversation: with Dakora
07:46
a precise picture can be drawn about
07:48
how Hannah is performing, where are her
07:51
strengths and weaknesses.
07:52
At the end of the term everything is discussed.
07:54
„As we have communicated on during the parents' evening
07:57
we have transferred the documentation into an electronical format.
08:00
The competence grid contains the competences of the state curriculum.”
08:11
Dakora – the key
08:14
for individual advancement.
08:17
It is for Hannahs' benefit. *„I am on level “M” at the moment and I will try to improve*
08:22
to advance towards the “E” level. I realize that at the moment
08:24
I am on “M” level and still have to work hard to get to the
08:27
next level.
08:35
I will take my time.”
08:36
Parent: *“I am happy about the development.*
08:38
We will try to be supportive
08:41
and help Hannah along her way.”
08:44
Sommer: *“Basically it was quite easy*
08:46
to introduce Dakora in class room work.
08:49
Students are very motivated - they
08:52
receive feedback immediately
08:55
after turning in their tasks
08:57
and also get feedback not only related
09:00
to the subject like Math but also
09:03
related to soft skills and interdisciplinary subjects
09:05
which are necessary during learning support or in the
09:08
observation phase during open learning time.
09:10
These are social
09:12
competences and teachers can give
09:14
feedback on process-related competences
09:16
which can be addressed during counselling
09:18
to develop
09:21
mutual goals.
09:23
Students really like to work
09:25
with this new digital medium because they also network
09:28
and communicate together. As a result the amount of
09:30
single students work decreases significantly but rather
09:33
new and very inspiring

09:36
learning processes and learning arrangements are created

09:40
that match weaker students with

09:41
high-performing students.

09:44
They support and empower each other

09:47
through this process."

09:49
The Commercial school in Backnang:

09:51
Here Dakora is also used and works well just as in any

09:54
other school type – free and looked after.

09:57
With very heterogeneous pupils

09:59
in the transition between school

10:01
and vocational training an individual

10:04
learning guidance is essential

10:07
The professional group for German language in Dual

10:08
Preparational Vocational Education meets

10:11
for the preparation of the topic

10:13
"business letter".

10:15
Colleagues have decided to

10:17
share their materials and work on them

10:20
together. „What we have here are in printed for the criteria of a business letter. It is designed for levels A, B and C but

10:31
we could differentiate on the level more detailed.

10:33
I would like to get your opinion on that.

10:37
We could give some additional information beforehand

10:40
which could be more help to some and maybe less help

10:42
for students on the C level.

10:46
Dakora covers everything

10:50
that AV Dual (dual vocational education) brings along

10:52
related to open learning times.

10:54
The competence grids are mapped in the app and teachers can

10:56
add individual materials

11:01
to competence fields.

11:03
And as soon as someone

11:06
uses a tablet during class room work

11:07
students are

11:09
magically drawn to this – Dakora is a help for that."

11:12
„We have many different students -

11:14
very heterogeneous students

11:16
where each individual learns

11:18
in his or her own pace

11:20
in an individual learning style.

11:22
Looking towards the student there is this great advantage that

11:24
learning progress can be documented

11:25
nice and easy.

11:27
It is also very helpful if we work

11:29
on our materials together.

11:32
In the end we can all

11:37
work with the same materials, we

11:39
can distribute them to students

11:40
so they can work self-organized."

11:45
Which material is linked to which competence?

11:48
The teachers of the professional learning group

11:51
have decided on this together.

11:53
Markus Merk and Linda Hertweck add

11:55
the worksheet to the appropriate

11:57
child competence with Dakora.

12:01
The criteria for a business letter

12:03
are already available digitally. Markus Merk

12:06
closes the file. Using the options menu of the app

12:09
he can now enable the edit mode

12:11
for the competence grid clicks on the desired child competence

12:14
and clicks on „add new material“.

12:19
The window „add new material“ opens and

12:22
Markus Merk enters a title for the new material.

12:24
The document can be found by this title using the search function

12:25
at a later time.

12:26
The difficulty level is correct, the file is uploaded.

12:37
[Music]

12:40
In the material section the file is now accessible

12:43
for all colleagues.

12:46
Both have the choice:

12:49
The document can be linked to further child competences.

12:53
This does not only work with text-files.

12:56
During the next step an

12:59
assignment is added to the

13:01
material database, also another link is added

13:04
with the goal that students

13:06
work on the topic independently.

13:10
The team adds materials to Dakora step-by-step

13:14
und based on the teachers' specialization. Not

13:16
everything has to happen at once and it can happen

13:20
anywhere.

13:21
Susanne Gropp works together with her colleague Frank Kaiser

13:23
at her desk in the staff room.

13:25
She logs in to the Dakora app using
13:27
the two-factor authentication.
13:30
A randomly generated number code entered
13:32
using a second device provides
13:35
data security – and she is logged in.
13:38
Susanne Gropp is preparing and reflects:
13:41
Which material should I use for which
13:43
student and to which extent
13:46
should it be made available
13:48
with Dakora.
13:49
This is how it works: the competence field on the left side
13:52
is called „writing texts“. Choose the child competence
13:54
on the upper row and click
13:57
on the button „material“.
13:58
Now Susanne Gropp compiles a small temporary
14:01
archive. She does this by
14:04
adding the four selected materials to
14:06
the so-called pre-planning storage.
14:08
Out of this storage she can take and distribute.
14:17
She now changes to the pre-planning storage.
14:19
[Music]
14:23
The materials are located in the left column.
14:25
In the right column the students are listed.
14:28
The document with the characteristics of a private business letter
14:31
is distributed to all students.
14:34
With a final click the teacher sends the assignment
14:36
to the whole class.
14:38
[Music]
14:47
Now she resets the selection and
14:50
distributes additional material individually. These three documents
14:56
are only distributed to Ayla and Kai.
15:00
This way Susanne Gropp can assign tasks and materials specifically
15:03
for an individual learning phase of one student or for all students.
15:05
This is a central and flexible function of Dakora.
15:08
During the open learning phase
15:15
in Backnang students also work on their assignments
15:17
using tablets – so Dakora is a
15:21
digital learning guidance -
15:24
individual learning processes are made visible
15:27
specific counselling becomes possible.
15:30
Students realize the goals of the curriculum

15:31
Using Dakora
15:34
students regulate, document and plan their
15:37
individual learning success. Dakora
15:40
enhances learning partnerships
15:42
between students and teachers. Gropp: "You are showing initiative! Very good! Go ahead..."
15:44
Lilly: *"With Dakora it is very easy to get the weekly schedule that is on your learning agenda on your tablet so*
16:02
all learning materials are in the right place and not lost.
16:04
Everything is on the tablet and
16:06
it is also possible to watch videos -
16:07
informational videos which are linked there
16:10
so it is easier to understand.
16:11
It is also possible to look in the
16:14
competence grid – even from home
16:16
if you have downloaded the app.
16:19
I can see what my performance is at the moment
16:22
in the different categories and where
16:24
it is still possible to improve.
16:25
And then it is possible to ask the teacher if
16:27
I can have additional material
16:30
through the app.
16:32
This way it is easy to communicate with the teacher – even from home."
16:36
Merk: *„At the beginning*
16:37
it is always a little difficult. You can ask yourself the question: Do I have to do this at my age?
16:40
But if you see young people being excited
16:42
and how they open up
16:44
and how they embrace this medium it becomes clear
16:51
that you have to do this as well. This way it is possible
16:53
to guide and
16:54
lead them on their way.
16:55
You give advice and support in this phase - if you see it this way.
16:58
And from this moment of consideration on
17:00
it was no problem for me anymore.
17:01
It is something for me as well – I am still learning
17:03
and I can use it to my benefit as well.
17:05
My lesson preparation becomes easier
17:09
and even after my instructions it has become easier for me.
17:11
I can concentrate more on the young individual
17:13
which sits opposite to me."