

Teams and Yammer

A classroom social network can enrich class activities by creating a fun, competitive and collaborative environment for students.

Summary

Social media and communication platforms help to organise teamwork in the workplace. But it can do just the same for a classroom. In this scenario, the teachers adapted Microsoft Teams and Yammer to a classroom setting to build an educational social network. They delivered home assignments to foster autonomous learning. They presented group challenges that keep students engaged and develop their collaboration skills. Everything happens on the online platform, which comes alive with the posts and activities of the teachers and students. Teachers can monitor all student discussions and answers, to track those who need more support or supplementary assignments. Teachers can easily involve their colleagues to create social networks for other subjects, making this a collaborative whole-school practice!

Keywords

Mathematics, rubric, classroom polling, online quiz, social network, self-assessment, online dashboard

Quick reference sheet	
Country	Portugal
Subject(s)	Mathematics, ICT
Implementation level	Advanced



DFA tool	Social media/Communication platform, Dashboard/Monitoring tool
Objectives	Develop collaborative skills and autonomous learning in students and monitor their needs on a classroom social network
Prerequisites	Office 365 access with MS Yammer and Teams
Target group age	Primary or secondary school
Tools & resources	Microsoft Yammer, Microsoft Teams, Microsoft Forms, Kahoot, Plickers, Socrative, Mentimeter
Duration	1 - 3 sessions

Context

Easy online learning space

Maria João Passos and Mónica Carvalheira in [the Freixo School Cluster](#) joined forces to implement a blended learning practice in their schools. They use MS Yammer and MS Teams to create an online learning space for their students.

Maria João and Mónica create and provide all the materials through the platform to their students. Students use videos, slides, tutorials, polls, surveys, as well as formative tasks such as rubrics. They learn with their classmates and interact with each other at their own pace, both at home and in the classroom. With every poll and post, the social network becomes a dynamic and eventful space.

Learning objectives

1. Personalise learning (the learner learns at his/her pace)
2. Promote collaborative learning
3. Assess students' learning
4. Provide feedback to students about their learning process
5. Give feedback to teachers about the learning process and content to be reviewed
6. Develop self-assessment skills



With these tools, students can review the contents (through tutorials prepared by teachers and adapted to the characteristics of students, depending on the difficulties diagnosed) as often as they want on any of their digital devices and anywhere, allowing them to learn at their own pace. By checking students' answers, teachers can understand how well students learned the content and adapt their teaching. In turn, students can better see whether they learned the subject.

A pocket social network

[Microsoft Yammer](#) is a social media platform typically used in the professional environment to facilitate collaboration among colleagues (see [this playlist of tutorials](#)). In this scenario, the teachers adapted this to a classroom setting as an educational social network. It is completely controlled by the teachers who are the administrators. They create a space that only members can see and navigate.

[Microsoft Teams](#) is another digital communication platform in Office 365 that provides a chat-based workspace, private messaging, tasks assignment and the creation of different channels to organise collaboration by topics (see this [demonstration video](#)). An interesting feature of teams is that it is possible to add additional features to customise it. For instance, the teachers can add apps like [Mentimeter](#), [Kahoot](#), [Plickers](#) for polling and online quizzes and [Microsoft Forms](#) for surveys.

The Activity

Polls to answer problems

Students need to register following an invitation from the administrator to become a member. The teachers start the session with individual work. This is followed by discussions within subgroups and finally, a discussion with the whole classroom.

Group work like classroom quizzes can also be done without the need for external apps, by using the poll tool in the app. For instance, the teacher can post a quiz just like on Facebook.



Example task 1

In poll about a physics problem posted on Yammer, Maria João and Mónica asked (see **Error! Unknown switch argument.**) 6th grade students to show whether they can identify the solid volume; identify data and missing data and calculate the volume of the solid by applying the appropriate formula.

The figure in the physics question represents the flattening of the base and the lateral surface of a box in the shape of a hexagonal prism. The task is to fill the prism with chocolate and wrap it as a gift. The box will be adorned with a ribbon, as shown in the figure. Students consider 5.9 cm as the measure of the apothem of the base of the box, then calculate the volume of the box, in cubic centimetres, rounded to the nearest integer. They then calculate the amount of tape used, in meters, in each box, knowing that to make a loop, 50 cm of tape is required.

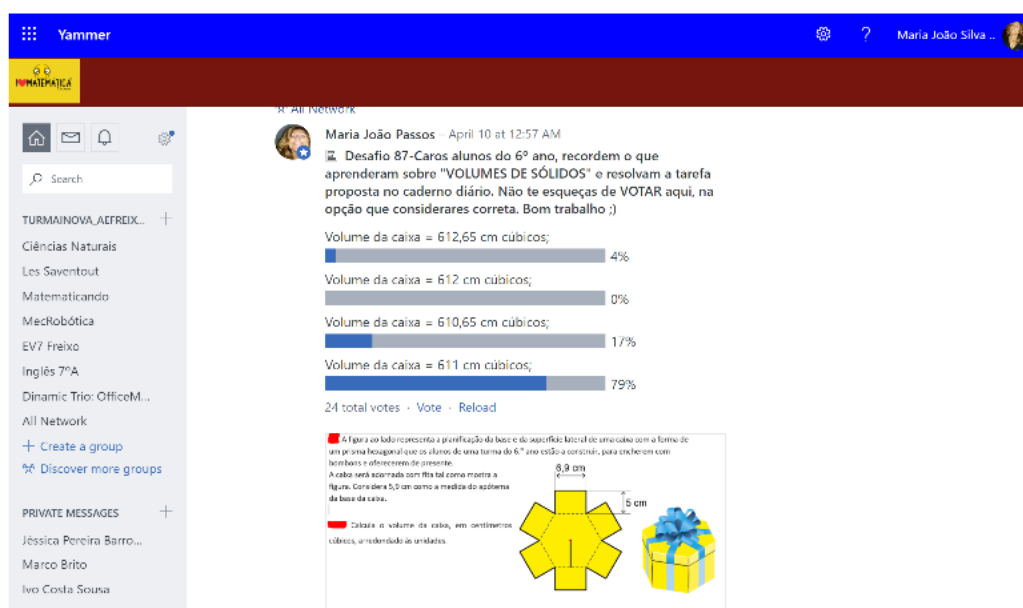


Figure 1. Classroom poll about the volume of solids, posted on Yammer. Some students have selected the incorrect answer. Students first go on **Yammer**. Each student carries out the challenge on their notebook. They then go to the poll posted by the teacher (or into a polling app) to provide the answer they consider correct by "voting".



After solving the problem in the classroom in collaboration with each other, students verify whether their reasoning is correct, while having the opportunity to clarify their doubts in collaboration with classmates. The class observes the poll results digitally and understand how their knowledge is related to the content, and to what group of votes they correspond.

Before creating a poll, the teacher can anticipate typical errors and add them as voting options in the poll. For instance, she might know from past lessons that students make a typical mistake in the equation for calculating volume. She can add this as a poll option to spot students that make this typical mistake. She can then provide feedback to address such mistakes.

Example task 2

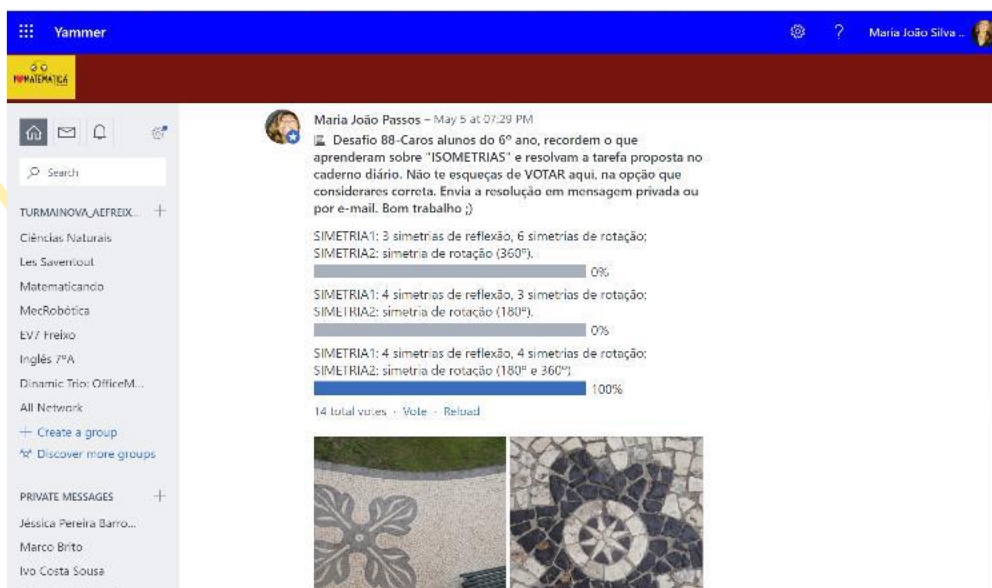


Figure 2 Classroom polling for the isometry activity. All students have voted for the correct answer.

For instance, in a challenge about isometries (see **Error! Reference source not found.**), ("How many and which ISOMETRIES do you observe in these Portuguese sidewalk models?") students all voted for the correct answer. In such a case, the teacher can move



forward without having to do a recap, as all the students reached the expected learning goal.

The teacher in turn gets a general view through the graph of the students' learning; she can see whether an incorrect answer received a significant number of votes. If that is the case, she can do a recap of the topic. She can do this either by recording a video of herself; posting a message; sending individual messages to the students who made that vote; or by addressing it in the classroom physically. In case there are almost no wrong answers, she can instruct the overall group for the next assignment, while individually checking on students who are experiencing difficulties.

After finishing a problem, students can assess their collaborative work on a rubric (see Figure 3).

RUBRIC ON "COLLABORATIVE WORK"

Responsibility and autonomy	Very good	Good	Enough	Insufficient
<p>Very good In addition to the criteria of the Good: • Discusses and synthesizes the development of group work • Reflects on the lessons learned and skills developed during the tasks.</p>	<p>Good □ Is available for group work. □ Accomplishes group work tasks without being reminded. □ Completes tasks on time □ negotiates colleague's views/perspectives to improve their contributions.</p>	<p>Enough □ Is not always available for group work □ Performs group work tasks but needs to be remembered. □ Completes some tasks on time □ sometimes negotiates colleague's views/perspectives to improve their contributions.</p>	<p>Insufficient □ Not available for group work □ Does not contribute to the tasks of group work. □ Does not complete tasks in time. □ Does not negotiate colleague's views/perspectives to improve their contributions.</p>	
Help	Very good	Good	Enough	Insufficient
	<p>Very good In addition to the criteria of the Good: • It is ready to help the group when an element is missing. • It encourages colleagues to share ideas/information, analyze it, helps clarify it and integrate it into group work. • It analyses the progress of group work and the contribution of colleagues, suggesting changes to the work with a view to improving it. • It helps group mates when they realize they have difficulties.</p>	<p>Good □ Helps the group solve problems, manages conflicts, and stays focused and organized. □ Shares ideas/information/views that help the group improve their work and performance, justifying their perspective. □ Provides helpful feedback to colleagues so they can improve their performance. □ Offers help to fellow members when they realize they have difficulties.</p>	<p>Enough □ Rarely causes problems for the group, but it does not always help to solve them. □ Makes an effort to share ideas/information/views with group colleagues. □ Sometimes provides useful ideas to colleagues. □ sometimes helps group mates overcome their difficulties.</p>	<p>Insufficient □ Causes problems related to the workings of the group and does not help resolve them. □ Does not share information/views with group colleagues. □ Does not provide relevant ideas to their teammates. □ Does not help fellow group members overcome their difficulties.</p>
Respect for others	Very good	Good	Enough	Insufficient
	<p>Very good In addition to the criteria of the Good: • It encourages group mates to respect each other. • Recognizes everyone's strengths and encourages the team to use them.</p>	<p>Good □ Listens carefully to your group mates. □ Contributes to the creation of a climate of active participation of all members of the group, respecting their opinions.</p>	<p>Enough □ Pays attention to what your teammates say, but not always. □ Fosters the creation of a climate of active participation of all elements of the group but not always.</p>	<p>Insufficient □ Doesn't pay attention to what colleagues in the group say. □ Shows no respect for group mates (interrupts, ignores ideas, hurts feelings).</p>

Figure 3 Rubric to assess the collaborative work of students

Example task 2

Another activity was designed with MS Teams. Each class of students had its own digital space in MS Teams, which was made available by the teachers, and provided access to their digital diaries, class materials and assignments. MS Teams gives the capability for members to work on and share a document collaboratively, hence building a community of active learners.



Students worked in groups on a document called “Our Digital ID card” (see Figure 4).

Students were identified by **their avatars and some description of themselves.**

This is an ICT task through which they learn to:

- **Create an avatar and download it**
- **Create, share and edit a collaborative document**
- **Format the text in the text processing software**
- **Insert and format the avatar image in the text processor**
- **Deliver the task with the document´s link**

Peer assessment of digital skills



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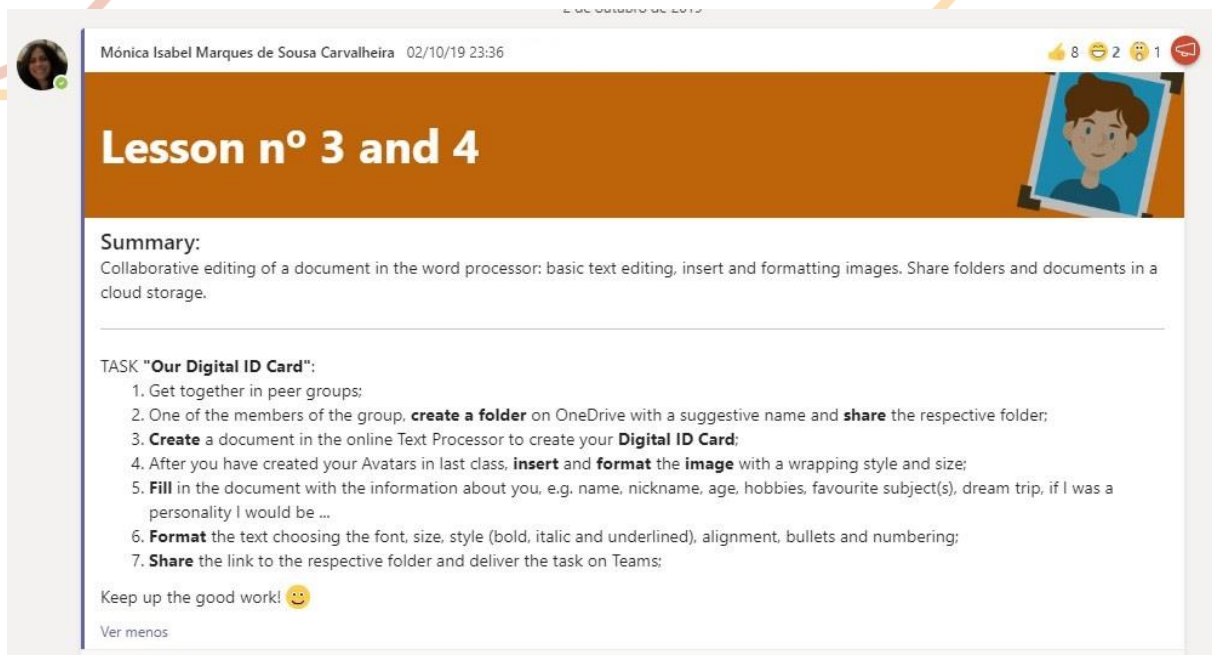


Figure 4 Instructions for the MS Teams digital ID card task

The teachers assign this task to all students and provide an assessment rubric to students. Thus, students can view the rubric from the start to focus on what is needed to complete the task. It is important to reinforce the use of the rubric while they are performing the task because it works as a self-guide. After they accomplish the task, they will send it to the teacher and that's when the formative assessment cycle begins.

Our Digital ID Card - Formative Assessment Rubric				5 pontos possíveis
Images (insert and format the avatar image within the document)				Peso: 25%
Excellent Work 4 pontos The images have been inserted into the document with the appropriate formatting.	Good Work 3 pontos The images were inserted with part of the requested formatting.	You can do it! 2 pontos The images were inserted without proper formatting.	Try again! 1 ponto The images were not inserted in the document, however the Avatar was created.	
Text Content (collaboratively)				Peso: 25%
Excellent Work 4 pontos Added all requested content without errors in a collaborative manner.	Good Work 3 pontos Added all the content in a collaborative way, although with some typing errors.	You can do it! 2 pontos Added some content in a collaborative way with some typing errors.	Try again! 1 ponto Added some content not in a collaborative manner.	
Text Formatting (font, size, style, alignment, bullets and numbering)				Peso: 25%
Excellent Work 4 pontos Formatted the entire document correctly (font, size, style, alignment, bullets and numbering).	Good Work 3 pontos Formatted almost the entire document (applied at least 4 of the requested formats).	You can do it! 2 pontos Carried out part of the formatting (applied at least 2 of the requested formats)	Try again! 1 ponto Formatted the text poorly (applied one requested format).	
Share and deliver the task (via link/OneDrive)				Peso: 25%
Excellent Work 4 pontos Shared, attached the link to the document and delivered the task within the deadline.	Good Work 3 pontos Shared but not added the document link and delivered the task within the deadline.	You can do it! 2 pontos Shared and attached the link to the document and delivered the task after the deadline.	Try again! 1 ponto Shared but not added the document link and delivered the task after the deadline.	

Figure 5 - Formative assessment rubric created on MS Teams



The Teacher gives feedback on the platform with the rubric (see Figure 5), while the students have the possibility to improve their work until the deadline. For instance, for the task to upload an avatar, the highest level on the rubric is to ‘upload the image in the document with the appropriate formatting’ while a lower level would be to have inserted the image without the formatting.

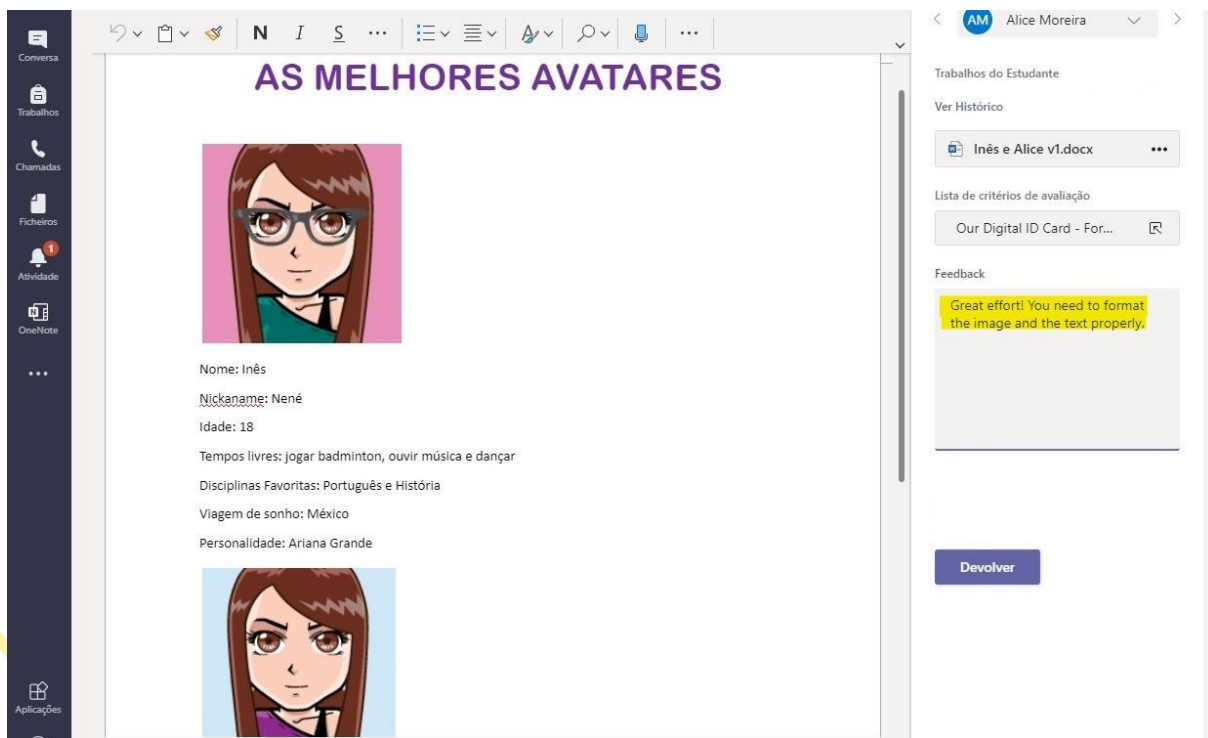


Figure 6 – General feedback provided by the teacher.

According to each criterion of the rubric, the teacher provides feedback to help students find out how they can improve their collaborative work (see Figure 6). After the deadline, the teacher assesses the final output of the students on the task.

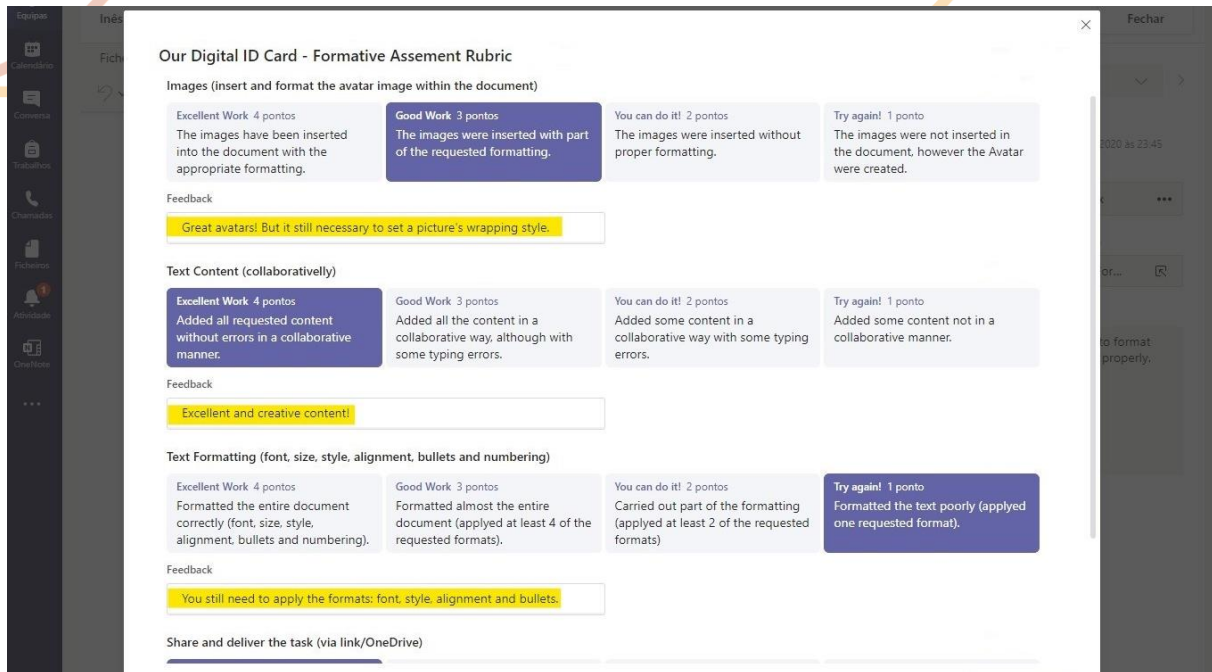


Figure 7 - Specific feedback and feedforward provided by the teacher.

Feedback both for the teacher and the students

In class, the teacher tracks the students' progress and identifies the difficulties they are experiencing while walking around the room observing their collaborative work. When using MS Teams, the teacher analyses the students' work and gives progressive digital feedback that can be intended as a record of the learning evolution.

Students, supported by teacher feedback, make a self-assessment of their individual and collaborative work. This enhances their ability to analyse and constructively criticise their work. If students reveal difficulties in some concepts or practical tasks, the teachers ask them to review autonomously some videos or other important contents related to the subject.

The teachers in this case also involved the parents to assist in their study. However, this is completely up to the teacher. Parents/guardians can follow students' work, as they have access to the apps.



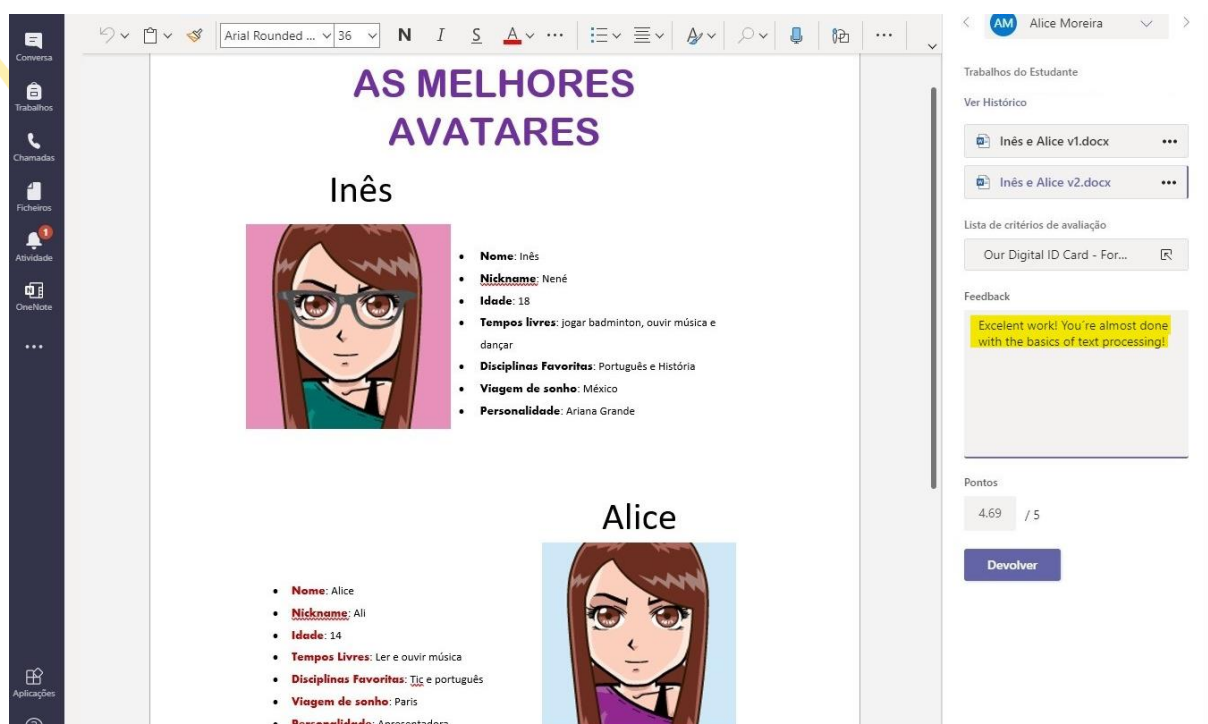
Remote and blended learning

MS Teams and Yammer enable online collaborative work and communication between students and teachers. Therefore, this scenario is also designed for full online settings.

During the distance learning periods, the most used tool was MS Teams since it works as a classroom management platform. It enables developing a digital learning environment including, communicating among students, teachers and even parents; creating rubrics to assess tasks, asking questions and clarifications, and providing online feedback.

As students were already familiar with Yammer before COVID-19, Yammer was embedded in MS Teams. Consequently, students were able to use all the resources that were already available in Yammer.

Moreover, Yammer is commonly used to interact with a broader audience of math students from 5th grade to 9th grade, which allows sharing digital resources to clarify doubts among students and to participate in tasks and challenges. The two tools were put together in one to maximise the tools' functionalities and the learning experience.



The screenshot shows a Microsoft Teams chat interface. The main content is a document titled "AS MELHORES AVATARES" (The Best Avatars) in purple text. Below the title, there are two student profiles:

- Inês:**
 - Nome: Inês
 - Nickname: Nenê
 - Idade: 18
 - Tempos livres: jogar badminton, ouvir música e dançar
 - Disciplinas Favoritas: Português e História
 - Viagem de sonho: México
 - Personalidade: Ariana Grande
- Alice:**
 - Nome: Alice
 - Nickname: Ali
 - Idade: 14
 - Tempos Livres: Ler e ouvir música
 - Disciplinas Favoritas: TIC e português
 - Viagem de sonho: Paris
 - Personalidade: Apresentadora

On the right side of the chat, there is a feedback message from the teacher, Alice Moreira, which says: "Excelent work! You're almost done with the basics of text processing!". Below the feedback, the score is shown as 4.69 / 5 and a "Devolver" (Return) button is visible.

Figure 8 – Final formative assessment coming from the feedback of the teacher



Outcome and lessons learned

From the classroom to the whole school

“After several colleagues realised that the students were very motivated by the Maths activities proposed in Yammer, they were curious to see how they could develop activities for their subjects.” say Maria João and Mónica. This is how they started giving brief trainings to several teachers to try it out with natural sciences, languages, expressions, etc. As several teachers wanted to try to implement it in their classes, we ended up giving them small formations.

The use of Microsoft Teams has now become a school practice. It works great as a digital learning environment for students and a hub for teacher collaboration.

Providing feedback in a timely manner is important for students to develop a self-constructive assessment of their work. However, the teachers found it at first challenging to give individual feedback to all students. Maria João and Mónica think of enriching future sessions by complementing the tasks with other assessment apps like **Kahoot**, Google **Forms** and **Mentimeter**.



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