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Innovate teaching practices to cope with educational fragilities. How can flipped learning help teachers to reach every student, in every class, every day

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Abstract

An extensive body of literature on flipped learning stresses the rapid evolution of this approach which focused mainly on the strategy itself, perhaps losing sight of the motivation that makes teachers choose it, that is "to reach every student, in every class, every day". It is now necessary to restore its mission, as flipped learning can be considered a suitable strategy also to support struggling students in achieving educational success. Adopting this approach, teachers can plan inclusive activities characterized by the centrality of the student and the relationships and aimed at developing not only content but also transversal knowledge and skills.

Keywords: Flipped learning, Flipped classroom, Struggling students, Early school leaving, Educational success.

Estratto

Numerosi studi sul flipped learning sottolineano la rapida evoluzione di questo approccio pedagogico-didattico. L'attenzione dei ricercatori risulta però focalizzata prevalentemente sulla strategia stessa, perdendo forse di vista la motivazione che spinge i docenti ad adottarla, ovvero: "arrivare a ogni studente, in ogni classe, ogni giorno". È ora necessario ritornare al suo intento primario affinché il flipped learning possa essere considerato una strategia idonea per aiutare gli studenti in difficoltà ad avere successo nel loro percorso scolastico. Adottando questo approccio, i docenti possono pianificare attività di tipo inclusivo, caratterizzate dalla centralità dello studente e dalle relazioni inter-personali, nonché finalizzate a sviluppare non solo conoscenze e competenze disciplinari, bensì anche quelle trasversali.

Parole chiave: Flipped learning, Flipped classroom, Studenti in difficoltà, Dispersione scolastica, Pratica didattica.

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1. The flipped learning approach: content in pills

Flipped learning is "a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter" (FLN, 2014). In order to better understand this approach, it is useful to deepen the distinction made by Bergmann & St. Clair Smith (2017) between individual space, which is defined "as the time students spend working independently on course content" and group space, which is "the face-to-face time a teacher/ trainer has with her students or trainees". In a traditional classroom, in which a transmissive teaching approach is adopted, group space is usually dedicated to the transmission of content and individual space is dedicated to the individual application of what was previously learned while in the flipped classroom what happens in the individual space and in the group space is inverted. Each student is asked to first approach concepts by studying independently, before the lesson, with the support of materials prepared by the teacher. In this way, group space can be consequently transformed into a learning environment in which students can actively work at and experiment what they learned beforehand. The FL approach gives teachers more time in the classroom that they can devote to their students; the point, therefore, is: "What is the best way to use this time?". Taking Bloom's taxonomy (fig. 1) as a reference, the inversion of the learning environments leads students to autonomously approach the lower levels of cognitive work (gaining knowledge and understanding) outside the classroom and to focus on higher level learning objectives during classroom activities, with the support of teachers and tutors. Assuming that the areas of the pyramids that are more extensive represent an increased time dedicated to that specific level, it is considered appropriate to recall Bergmann, who emphasizes that the most realistic configuration of Bloom's taxonomy is that of a diamond shape. Most of the activities carried out in the classroom involve the analysis and application of the previously learned knowledge, rather than the elaboration of original products, an objective that requires a great deal of time and resources for its concrete realization (Bergmann & St. Clair Smith, 2017).

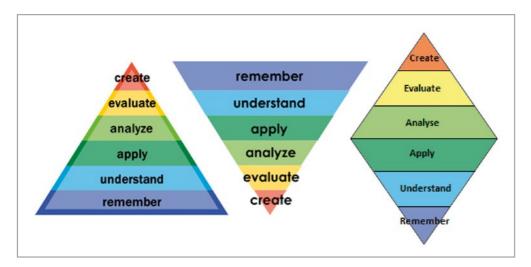


Fig. 1 - Revisions of Bloom's taxonomy (adapted from Bergmann & St. Clair Smith, 2017).

2. Time to refocus attention

The increasing body of evidence emerging from an analysis of the scientific publications and the grey literature materials concerning flipped learning (Talbert, 2018) highlights a constant and rapid evolution of this approach mainly due to the research activities undertaken on FL teaching practices, to the sharing of knowledge among school professionals and to the evolution of educational technologies (Bevilacqua, 2018). Day by day, research after research, teachers and researchers tried to explain how the FL approach works and what kind of conseguences it may bring (Greaves, 2018). Many studies demonstrate its effectiveness (Bishop & Verleger, 2013) (Aronson & Arfstrom, 2013) (Green & Schlairet, 2017) (Brame, 2013) (Lage et al., 2000) (Newman, Kim, Lee, & Brown, 2016) (Thai, De Wever, & Valcke, 2017) (Fraga & Harmon, 2015) (Strayer, 2012). A more in-depth analysis reveals that the adoption of the FL approach leads to

- better communication of knowledge and instructions (Hamdan, McKnight, & McKnight, 2013);
- active learning through cooperative and problem-based activities (McCarthy, 2016) (Hamdan et al., 2013);
- an increase in attention and motivation, a stronger involvement with the course materials and better interaction among peers (Parker, Maor, and Herrington 2013);
- a better relationship between teacher and students (Kahn, 2011);
- greater perception of self-efficacy (Kurt, 2017);
- a positive attitude towards learning (Stone, 2012);
- a higher level of reflection and research (McLaughlin et al., 2013);
- increased motivation to study (Davies, Dean, & Ball, 2013);
- better learning outcomes (Marcey & Brint, 2012) (Love et al., 2014) (Moravec, Wil-

liams, Aguilar-Roca, & O'Dowd, 2010) (Missildine, Fountain, Summers, & Gosselin, 2013) (Talley & Scherer, 2013).

There are also studies in the literature that indicate multiple critical issues in the application of the FL approach. Many teachers report concerns about the overall experience of their course students (Davies et al., 2013; Enfield, 2013; Lage et al., 2000; Missildine et al., 2013). Strayer (2012) emphasizes the confusion and disorientation experienced by students in experimenting with this new approach. Other authors (Critz & Knight, 2013; Enfield, 2013; Newman et al., 2016) stress the considerable investment and effort required to activate a flipped learning pathway. Van Vliet, Winnips, & Brouwer (2015) point out that there is a gain in terms of meta-cognition and collaborative learning strategies, but also that these effects do not persist over time.

Regarding students' perception of the FL approach, a general lack of scientific evidence can be found in the literature (Newman et al., 2016) (Herreid & Schiller, 2013). However, it is possible to state that many studies show a favorable perception concerning FL (Butt, 2014) (Kurt, 2017). Students feel satisfied with the flipped learning environment (Enfield, 2013) (Gaughan, 2014) (Hoffman, 2014) (Kim, Kim, Khera, & Getman, 2014) (Lage et al., 2000) (Pierce & Fox, 2012) (JF Strayer, 2012) (Vaughan, 2014) (Wilson, 2013) and they seem to prefer this approach to traditional ones (Bachnak & Maldonado, 2014) (Bates & Galloway, 2012) (Christiansen, 2014) (Lage et al., 2000) (McLaughlin et al., 2013) (Sarawagi, 2014) (Tague & Baker, 2014) (Findlay-Thompson & Mombourquette, 2014).

It is furthermore possible to state that in the vast majority of the documents the focus has been on the strategy itself, perhaps losing sight of the motivations that lead teachers to choose it, that is "to reach every student, in every class, every day" (Bergmann & Sams, 2012). It is time to talk less about the success of FL as hardware, and more about the way teachers can achieve the goals that have been set and the strategies they adopt every day to achieve these goals. (Bergmann, 2018).

3. Why the flipped learning approach could be useful for struggling students

Within school walls, there is an increasing number of students with Special Educational Needs (SEN) or educational fragilities which are not characterized by physical or learning disabilities. These are struggling students whose disadvantages are mainly due to cultural, socio-economic, socio-linguistic, psycho-emotional and behavioral difficulties. Nowadays it is a priority to focus on this segment of the population at greater risk of early school leaving and educational failure, as there is no specific legislation that provides specific resources to enhance their educational pathways. Many teachers implement, in their daily teaching practices, specific attention and strategies aimed at supporting students who "cannot make it by themselves." No documentation attests what is done at school for these students as these strategies do not respond to a normative request. Moreover, the choice to implement specific support strategies for struggling students is left in the hands of every single teacher; therefore, they are implemented only by those who have a significant culture of inclusion. While the number of struggling students is perceived as increasing - there is a lack of quantitative and qualitative data regarding this specific population - any teacher can do something to prevent and deal with educational fragilities (Girelli & Bevilacqua, 2018).

Flipped learning is a suitable strategy to support struggling students. By shifting the

phase of the transmissive learning to the preliminary individual space, the flipped learning approach allows teachers to plan in-class activities in which the student is concretely placed at the center of the learning experience. The interesting aspect of FL is that it is flexible hardware, in which a teacher can insert the most effective teaching methods and techniques to achieve a goal, maximizing his or her face-to-face time with students. Teachers can also spend more time helping students who struggle most, as they can work one-on-one or in small groups, which is an effective way to meet the needs of students with educational fragilities and learning difficulties (Bergmann & Sams, 2012) (Sota, 2016). Altemueller & Lindquist (2017) give a short but convincing description of the characteristics of the flipped learning approach, which make it particularly suitable to meet struggling students' needs:

"Studies of student perception indicate that the flipped classroom is more advantageous than the teacher-centered approach of the conventional method of teaching. Flipping the classroom assists teachers in differentiating instruction to meet the needs of learners with learning difficulties. Self-pacing, mastery learning provides students with choices in how they prefer to learn content. The teacher essentially transfers the responsibility for learning to the students. The flipped classroom provides for increased co-operation and co-operative learning. Students help each other learn instead of relying on the teacher as the exclusive disseminator of knowledge".

The transition from passive to active learning can lead to greater behavioral, emotional, cognitive and agentic engagement for those students who are involved in flipped learning pathways. This happens when students feel more interested and enjoy inclass activities. Participating actively in their learning process means for students to listen carefully, pay attention and participate naturally in the activities proposed by the teacher (Jamaludin, 2014).

3.1. Self-pacing learning, to become more responsible

Both in individual, as well as in group space, students can work at the pace they consider most appropriate, in line with their specific learning style.

As regards activities in the personal space, since all direct instructions are recorded, students can watch, pause and rewind the videos as many times as needed, to make sure they learn and consolidate critical concepts. In the same way, this approach also meets the needs of the most gifted students, who can view videos faster (Bergmann & Sams, 2012) (Altemueller, Lindquist, 2017). Furthermore, students and teachers can more easily predict and schedule their homework time. Watching and taking notes on a video takes less time, or at least a more predictable time, than applying at home knowledge previously acquired in the classroom (Bergmann & Sams, 2014) (Sota, 2016). Even the technical choices made by the teachers to create the videos can meet the specific needs of the students: the shorter the videos, the higher the engagement, the concentration and the longer-term retention of content (Slemmons, 2018).

As far as in-class activities are concerned, according to Bloom's model of mastery learning, the flipped mastery approach can help give each student enough time to reach mastery (Jackson, 2013) (Altemueller, Lindquist, 2017). Considering the critical components of this specific approach:

- students work either in small groups or individually at an appropriate pace;
- the teacher makes a formative assessment of students and gauges student understanding;
- students demonstrate mastery of objectives in summative assessments.

For students who do not master a given objective, remediation is provided (Bergmann & Sams, 2012, p. 52). It is possible to state that all class students can work at their own pace. As O'Flaherty & Phillips (2015) underline, scientific literature refers to several qualitative comments that the flipped model enhanced the learning experience and promoted student empowerment, development, and engagement. As reported by Christina Griffin, a 1:1 teaching assistant:

"The flipped classroom has all of the information presented to the students with all different learning styles and therefore accessible to them. I can spend more time helping students become independent learners and step back; rather than solely relying on me" (Swan, 2017)

By taking an active role during the teaching activities, students feel more involved and become responsible for their learning. This change of attitude towards learning may often be perceived as frustrating by students, who are otherwise used to being more passive, especially during in-class activities, but this is a struggle that can lead to genuinely transformative learning (Sota, 2016) (Bevilacqua, 2018).

3.2 Not only individualization, but also personalization

As Bergmann & Sams (2012, p. 28) stressed, one of the struggles in today's schools is accommodating a vast range of abilities in each class: students who excel, average students, students who struggle, students with physical and learning disabilities. Interestingly, a careful analysis of scientific literature shows that some of the pioneers of flipped learning have experimented with this approach to engage a broader spectrum of learners:

The inverted classroom explicitly allows for students of all learning styles to use a method or methods that are best for them. [...] In general, students have many opportunities to "see" and experience economics principles through the experiments, collaborate with other students, hear traditional lectures, and further their learning through independent reading and use of the other materials. Although it is difficult to appeal to the learning styles of every student in the classroom, the inverted classroom implements a strategy of teaching that engages a wide spectrum of learners" (Lage, Platt e Treglia, 2000):

Several experiences and studies demonstrate that flipped learning makes it possible not only to individualize learning pathways – i.e. to set shared goals for every student while diversifying learning pathways – but also to personalize them, i.e. to set different goals for everyone.

"For our students who quickly understand the content, we have found that if they can prove to us their understanding of a particular objective, we will cut down on the number of problems they need to do. Think of these as individual contracts with each student, where the student has to prove to understand. These students appreciate this because they realize we are not interested in busywork, but rather learning. For our students who struggle, we look for key understanding. We realize that our course is hard for many students and that learning does not come easily for all. For these students, we often modify their work on the fly by asking them to complete only key problems instead of all of them. This way our students who struggle will learn the essential objectives and not get bogged down with some of the more advanced topics that may confuse them" (Bergmann & Sams, 2012, pp. 28-29);

Teachers can intentionally implement tiered activities to align with multiple levels of student achievement. These activities give students the opportunity to work with the same content, essential ideas, and skills, but with varying degrees of ability and complexity (Tomlinson, 2014) (Altemueller, Lindquist, 2017). As Sota (2016) reflects, personalized learning involves "tailoring learning for each student's strengths, needs, and interests—including enabling student voice and choice in what, how, when, and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible" (Patrick, Kennedy, & Powell, 2013, p. 4). In addition, "personalization refers to a teacher's relationships with students and their families and the use of multiple instructional modes to scaffold each student's learning and enhance the student's motivation to learn and metacognitive, social, and emotional competencies to foster self-direction and achieve mastery of knowledge and skills" (Redding, 2013, p. 6). All these commitments take a considerable amount of time, but teachers can enjoy better opportunities to accomplish them because, after having carefully planned these activities, the majority of the time spent in class is used by teachers to walk around the room and help students (Bergmann & Sams, 2012).

3.3 Relationships matter

A second essential element in implementing what has been previously hypothesized is the empowerment of relationships. Building relationships is one of the tasks of teachers: relationships are part of the teaching activity as it is through relationships that teachers can raise interest and passion for a subject among students. Entering into the messiness of relationships can therefore be key to building stronger and more authentic relationships between teachers and students and among students themselves.

Concerning the relationship between teachers and students, what has been clearly stated by Bergmann (2016) – i.e. that the best way to motivate students can be summed up in one word: relationship – is not a new idea. He underlines that extensive research (Nugent, 2009) (Brown, Starrett, 2017) ties positive student-teacher relationships to better student achievement. Within this learning context, educational technologies are exploited by the teacher to move the lower learning processes - for which stu-

dents need less support - to the individual space, while consequently increasing the quantity and the quality of interactions with students (Bergmann & Sams, 2012, pp. 25-26). Flipped learning also allows teachers to know their students better. The experiences gathered over time have helped recognize that the time spent in the classroom can also be an opportunity for teachers to share something about themselves with the students (i.e. who they are, why they chose this approach), help students understand that teachers are human beings in addition to being teachers and recognize students, take time to understand who they are, how they are connected with their learning experience, what matters to them, thus making the teaching materials and learning objectives accessible. This is possible only if the relationship is one-to-one; building relationships with individual students is the first step in building a class group.

Knowing my students better is the catalyst for many of the ways my flipped classroom has evolved. I'm playing around with some self-pacing because I know my students better. I am able to provide more choice in my classroom because I know my students better [...] My flipped classroom has allowed me to know my students in such a way that I can no longer NOT make adjustments when necessary (Gibbs, 2017):

Flipped learning also allows teachers to create a learning environment where students relate and respect each other, where students can work together even though they are not friends. Organizing and implementing teamwork usually takes a long time but moving direct instruction into the personal space makes it possible. It is interesting to refer to the thought of Prupas, who "asserts that the most effective approach for flipping the classroom for special education students is not vastly different from the approach that is effective for general education students. Her philosophy is that instead of doing things differently we have to do different things. Prupas believes the real benefit of the flipped classroom lies in the collaborative and active learning aspects of the classroom" (Altemueller, Lindquist, 2017). According to McCollum (2017), the relationships that students develop with their peers, peer leaders, and teachers are so relevant as to be considered the key factors that determine whether flipped learning is a success in the classroom.

The adoption of cooperative learning can promote the empowerment of social and civic competences (Bevilacqua, 2018): for students, the opportunity of experiencing collaboration and cooperation enhance their sense of belonging and contributes to creating a self-sustaining community, where students are asked to actively develop class routines and policies concerning the daily organization of learning materials, tools, and spaces (Bergmann & Sams, 2014, 1156-1178). The possibility for students to work in groups, and understand and solve exercises together, can facilitate the creation of communities of discourse and thoughts. Active participation in these social contexts can help students start those verbal exchanges that can promote the quality of thinking of each person (Mortari, 2008). Each class or group of students could also assume the characteristics of a community of practice (Wenger, 1998), where students interact and engage in shared activities, assist each other and collaboratively share information, meanings, ideas, determine solutions and build innovations. By having the opportunity to experience higher level learning processes, students can also collectively create knowledge and products (Lukassen, Pedersen, Nielsen, et al., 2014).

3.4 [Not so] soft skills

When a child, a teenager or a young man or woman is affected by educational fragilities caused by cultural, socio-economic, socio-linguistic, psycho-emotional and behavioral difficulties, the fact of strengthening the so-called soft skills could play a key role in overcoming those barriers that prevent achieving a state of wellbeing and educational success. In addition to social and civic competences, which have already been mentioned, the empowerment of two other key competences (European Commission, 2006) can be strategic: *"learning to learn"* and the *"spirit of initiative and entrepreneurship"* (Bevilacqua, 2018).

Concerning the first competence, according to Bevilacqua (2018), four dimensions are strengthened by experiencing FL educational pathways:

- a. The dimension of entrepreneurship: students feel stimulated to participate actively, to express themselves and their thoughts, acquiring greater awareness of themselves and their learning processes, as well as identifying multiple strategies for organizing and improving their study method;
- b. The dimension of reflexivity: students can put into action processes of both reflection-in-action, to face and positively conclude exercises, and reflection-on-action, to reflect on themselves, thus acquiring a greater awareness of knowledge itself and of the skills that are being studied. Reflecting is also functional to improving their self-evaluation skills, concerning the products they have developed, and the level of learning achieved during the course.
- *c. The dimension of reciprocity*: during the course, the students were able to draw strength from their classmates to achieve their learning objectives, as well as to improve themselves and their learning.
- *d. The dimension of resilience*: although students often struggle to experience higher level learning processes, which

they are not used to, they mainly react positively. They learn to get involved and even to question themselves; they pursue goals with tenacity, they take care of their thoughts and their actions, they learn they can live with uncertainty and, in case of an error, they learn not to give up.

As far as the "spirit of initiative and entrepreneurship" is concerned, students living in a flipped learning environment learn to:

- a. Translate ideas into actions: In a flipped classroom, students are able to express their ideas and opinions, without fear, to their group mates; they feel free and at ease in starting a discussion, in proposing a new direction to the work in progress; they are able to express their creativity to create products; they have the opportunity to translate ideas into concrete materials and documents, sometimes accepting to take risks and working with new classmates and with new teaching tools and methods.
- b. Promote good governance: students are able to actively contribute to the organization of group work and materials, to take matters into their own hands to overcome difficulties or moments of lack of interest, to take a step back to let yourself be guided, if necessary.
- c. Acquire and demonstrate awareness concerning ethical values: students engage in a dimension of service, that means that they both help others and ask for help; they had an attitude of openness and authentic listening that can also lead, when necessary, to take a step backwards from their positions.

What has been described by Bevilacqua (2018), really fits with the experience of democratic education narrated by Tom Driscoll, a social studies teacher in Putnam, Connecticut (Bergmann & Sams, 2014).

3.5 The assessment issue: taking students by the hand, towards independence

Overall, in FL paths, an attempt is made to adopt authentic assessment strategies to provide students with the opportunity to think critically about their learning processes and outcomes. The choice of adopting specific tools such as the portfolio, rubric, and checklist is based on promoting students' autonomy also in assessment processes. The added value of this strategy lies in the fact that not only summative but also and especially formative assessment moments are planned. A valuable aspect of the flipped classroom - as stressed by Altemueller & Lindquist (2017) and Sota (2016) - is indeed the immediate feedback that can be given to students. Teachers can support students during the development of in-class activities, providing them with feedbacks when reguested, when necessary or when deemed appropriate. In any case, the student does not have to wait for days to understand if the exercise was done correctly or if remediations are necessary, as informal formative assessments take place continually. Completing homework in class gives teachers better insight into student difficulties and learning styles, as Altemueller & Lindquist (2017) underline and this is particularly relevant in the case of individualized or personalized strategies.

3.6 A technology-friendly approach

This has been repeated many times: FL does not mean videos. This approach winks at educational technologies first of all to gain time for in-class activities and for relationships, and also to differentiate and individualize learning processes. SEN and struggling students can also exploit assistive software and applications as compensatory tools, to learn within the framework of their personal space, as well as to participate in in-class activities with their mates.

Although the central element of the FL approach is not the use of educational technologies, their effective and efficient use makes the difference in the overall learning environment. The quality of videos designed and implemented by teachers for students' learning in the individual space is closely related to the achievement of learning objectives; on the Internet teachers can find many useful tips to create useful videos, as they allow students not only to listen and understand learning content but also to interact actively. Educational technologies are beneficial also in the group space to facilitate all students, even those with educational fragilities, in experiencing higher level learning processes, such as analyzing, applying and creating personal learning objects. Finally, educational technologies can help teachers create and implement formative assessment pathways, enhancing the perspectives of assessment for learning (Sambell, McDowell & Montgomery, 2012) and assessment as learning (Earl, 2014), which could have a significant impact on the learning processes of struggling students. This kind of assessment, according to the mastery learning model, allows students to implement self-assessment pathways for their knowledge and skills, as well as to module their own pace of learning, in line with their personal needs.

3.7. The 'in-class flip' option

The in-class flip model can be considered a specific type of FL. Within this model, teachers and students do not depend on students watching the video at home to be able to flip, because everything happens within the space of the classroom. The classroom is set up into stations where groups of student work independently or collaboratively to complete the activities. This model is particularly suitable for struggling students for three reasons. First, teachers can have a better control of the overall learning environment, even of what happens in the personal space, and they can guide students if necessary. Second, students who do not have enough autonomy – like students attending primary schools, but also struggling students in schools of all types and at all levels – can be supported continuously. Third, teachers can differentiate not only in-class activities but also instructions, and plan and propose tiered material at all student learning levels.

4. It works, if only ...

The success of a flipped learning pathway in terms of achieving learning objectives, as well as school and personal well-being, should not be taken for granted. Many elements must be considered.

A sense of co-responsibility

First of all, flipped learning is not more complicated than other teaching approaches, only if all people involved – teachers, students, administrative staff, parents – accept to abandon old routines and embrace new ones. The fact of leaving behind well-known and consolidated patterns and habits and the loss of old customs may generate a considerable sense of fatigue and a sense of displacement and disorientation. Everyone is asked to get back into the game by adopting an unprecedented posture, putting in place a strong sense of co-responsibility.

Through the involvement in inquiry and reflection-based activities, students are asked to take part in a participatory experience that requires considerable commitment and dedication. At the same time, however, they have the opportunity to experience the playful character – competition, bet, risk, invention, loss, excitement – that this educational project involves.

A sense of care

Taking care is an essential overarching element in FL projects. Firstly, this means for teachers that they take care of their students, in particular through multiple forms of personalization and individualization of teaching and learning processes: secondly. this entails that students take care of each other, particularly in cooperative-based exercises and in the process of mutual empowerment. Moreover, a sense of care for reflection and research also emerges, in terms of a kind of knowledge that is not transmitted one-way by teachers to passive students but is based on active participation. Furthermore, students take care of their learning products - i.e., the authentic tasks they learn to design and achieve and accomplish polished and refined performances and products.

It also emerges that teachers increasingly need to take care of themselves. In today's social context, teachers need to focus on their well-being, as they tend to sacrifice things that help make them great educators – time with family, health, and mental well-being – to meet the demands of current educational expectations. This happens, even more, when teachers are asked to cope with SEN pupils or students with educational fragilities. Jones and White (2018) give several suggestions for teachers who need social-emotional support.

5. Conclusions

Recent evidence from the scientific literature on the topic of FL stresses the potential of this approach to respond to the needs of struggling students. It allows teachers to create more meaningful and inclusive learning environments. This can be accomplished if they grasp and exploit the transformative nature of this educational proposal, break up consolidated routines and teaching habits, and activate real attention to the interaction with students and among students, putting their knowledge and actions at the service of others.

The transition from a traditional didactic approach to FL must be gradual and well thought out since it foresees the abandonment of teaching and learning routines that have been consolidated during years of school as teachers and students. A continuous process of accompanying and supporting both teachers and students can be the key to the success of this educational choice. Teachers can receive constant support at training courses recognized by the scientific community, by consulting the results of research on the experiences of FL that have been published in scientific journals, and by sharing their experiences within numerous communities of virtual practices, in which it is possible to exchange views with FL experts. Students – who are asked to take charge - and therefore to feel actually responsible - of their own learning process, but also of that of their peers – must be accompanied step by step by their teachers, who are required to design specific - didactic, technical, and relational tools, which are necessary in accompanying students in their awareness-building process.

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