# EPISODES OF SITUATED LEARNING:
# A METHODOLOGICAL FRAMEWORK TO ENCOURAGE INCLUSION AT SCHOOL

**Alessandra Carenzio**[1]

*Department of Education, Catholic University of Milan, Italy*

alessandra.carenzio@unicatt.it

**Salvatore Messina**

*Department of Psychology, eCampus University, Italy*

salvatore.messina@uniecampus.it

## Abstract

The contribution aims to present the framework of the Episodes of Situated Learning (ESL), as empirically experimented in special education contexts in Italy and Spain. Starting from the ESL approach and from the supportive results found by national cases in inclusive settings (Rivoltella, 2015), the article suggests that this method can be useful for the training of teachers working in the field of disability (even of serious entities) and for classroom activities in inclusive environments.

Il contributo si propone di presentare il quadro degli Episodi di Apprendimento Situato (EAS), come empiricamente sperimentato in contesti di educazione speciale in Italia e Spagna. Partendo dall'approccio EAS e dai risultati di supporto riscontrati da casi nazionali in contesti inclusivi (Rivoltella, 2015), l'articolo suggerisce che questo metodo può essere utile per la formazione degli insegnanti che lavorano nel campo della disabilità (anche di gravi entità) e per le attività in classe in ambienti inclusivi.

## Keywords

ESL; Episodes of Situated Learning; inclusion; school; special needs.
EAS; Episodi di Apprendimento Situato; inclusione; scuola, bisogni speciali.

---

[1] This article has been developed jointly by the authors. A. Carenzio wrote §1 and §3, S. Messina wrote §2 and §4, §5 has been written together.

**1. Introduction**

In 2013, the ESL method (Episodes of Situated Learning, in Italian EAS) reached the hands of teachers, researchers and students. Almost 10 years have passed and it seems to keep interest and attention alive. By doing a quick online search in Google, some useful data turns out: using "EAS method" (so just in italian), the search engine returns less than 300,000 results in about 0.41 seconds. If we just enter the acronym EAS and ask Google to complete the search, this operation produces the following labels: "EAS teaching", "EAS acronym", "EAS definition", "examples of EAS", "EAS phases", "EAS in english for primary school", and, finally, "examples of EAS in history for primary school". A large number of videos, presentations, glossaries, explanations and materials witness to the great expendability of the method.

If we then move on to books, we understand that the method has been discussed and adopted by many teachers: inclusion and interculture, music, mathematics, computational thinking, history, philosophy, science, grammar, audiovisual narration. This means that not only the method becomes an activator of teachers' interest for design, but that it lends itself to different disciplinary frameworks with adjustments that, over the years, have lived in a kind of round trip.

As we can see, the holding of any practice takes place over time and its success is determined by the ability to affect and contaminate different areas. This happens in the case of a tool, adopted and re-designed in different fields, but also considering a method that becomes an important opportunity to rethink our didactic posture. The ESL method is no exception: as organized in the well-known tripartition of its phases or moments based on different logics (problem setting, learning by doing, learning by reflecting), the method has been the object of adaptation and of great fruitfulness in its dissemination.

First, many teachers and educators adopted the method, including professionals who at the beginning were not so impressed. Second, the ESL method has been able to meet different fields: humanities, scientific disciplines, artistic areas, pastoral contexts, training, communities, beyond the school environment.

The contribution aims to present the framework of the Episodes of Situated Learning, as empirically experimented in special education contexts in Italy and Spain. Starting from the ESL approach and from the supportive results found by national cases in inclusive settings (Rivoltella, 2015), the article suggests that this method can be useful for the training of teachers working in the field of disability (even of serious entities) and for classroom activities in inclusive environments.

**2. School and inclusion in Italy and Spain**

The choices of the two countries regarding inclusion, although paired with common elements, substantially differ starting from the contexts, and professionalism, involved in the inclusive process of pupils with special educational needs.

In Italy, drastically, with the promulgation of Law 517/77, the institution of the support teacher marks, the closure of differential classes and special schools[2], providing later a clear direction on the integration and inclusion of pupils with Special Educational Needs. Indeed, we must wait for Law 104/92 for *the educational and social integration of students with disabilities*, but more specifically the D.M. 27/12/2012 and the C.M. n. 8/2013 to respond to didactic and methodological demands to support teachers' work for the implementation of inclusive actions for each student. Today's picture of inclusion in Italy is based on the following classification of special educational needs:

1.  pupils with sensory, mental, motor disabilities, certified in accordance with art. 3, paragraphs 1 or 3 of Law 104/92 that entitles the attribution of the support teacher;

---

[2] A clarification is necessary: Law 517/1977 does not formally abolish special schools, but only accelerated the process so that the education of pupils with disabilities took place in "normal" classes, with the very important "institution" of the support teacher. The differential classes that were within the ordinary school system were abolished, establishing in their place the support teacher. No text in thirty years has formally repealed the previous laws on the subject and, for this, it is still possible to find special schools in Italy because their normative reference is the Law 118 of 1971.

2. pupils with Specific Developmental Disorders (SDD): Specific Learning Disorders (with diagnosis according to art. 3 of Law 170/2010) and other diagnostic frameworks such as speech deficits, nonverbal abilities, motor coordination, attention and hyperactivity, and limited intellectual functioning that is considered a case of boundary between disability and the specific developmental disorder. These disorders, in most cases not certifiable under Law 104/92, do not give the right to have a support teacher;

3. pupils with socio economic, linguistic or cultural handicaps: the identification of these types of pupils must be taken on by class councils on the basis of psycho-pedagogical considerations.

In Spain, with the promulgation of the Real Decreto (Royal Decree) n.696 (R.D. 696/1995 Ordenación de la Educación de Alumnos con Necesidades Educativas Especiales, 1995), in addition to the provisions of the LOGSE (1990), there is a reconsideration of the NEE, no longer intended as special educational needs in relation to pupils with disabilities, but towards students and pupils with educational deficiencies and/or with an unsatisfactory school progress that affects academic performance, or with intelligence above average, with psychic, sensory, motor disabilities or with serious behavioral disorders. NEEs are no longer seen only in consideration of needs arising from a clinical condition that compromises the "normal" participation of the pupil in school life, rather they are configured as real educational needs inherent in the educational, social and psycho-social condition of the pupil who require a "special and specialized" attention to ensure that every pupil can «achieve, within the same system, the objectives set generally for all students».

The inclusion of a pupil in a Centro de Educación Especial - CEE (Special Education Centre) takes place only in cases where the tools and resources present within an ordinary centre cannot guarantee a full development of the pupil's personal abilities. Care within the CEE is provided for pupils with severe disabilities, until the age of 21. For pupils with ACNEAE (Alumnos Con Necesidades Específicas de Apoyo Educativo), pupils with specific developmental needs who demand educational support in the classroom, without the intervention of the support teacher.

With the promulgation of the Ley Orgánica 08/2013 para la Mejora de la Calidad Educativa (2013), partially changes the categorization of special educational needs, and in particular for the group of pupils with serious behavioural disorders, accompanied by a support teacher and - in particularly serious cases - the integration within the CEE.

### 3. ESL: key aspects of the method

As we said, the method was born in 2013 thanks to the reflection of Pier Cesare Rivoltella (2013, 2015, 2016) and it is organized in three phases (see Table 1) based on microlearning and the essential principles of design:

- aligning the aims of learners and teachers,
- controlling alternative conceptions,
- supporting knowledge generated by practice,
- encouraging the meta-cognition triggered by the theory and meta-reflection (Laurillard, 2014, pp.111-112).

| Phase | Teacher's action | Student's action |
|---|---|---|
| **Preparatory** | Assigns tasks<br>Builds and exposes a conceptual framework<br>Provides a stimulus<br>Gives a delivery | Listens, reads, understands, explores<br>Performs assigned tasks (in advance and mainly at home, individually)<br>Follows the teacher's stimulus (created with digital tools and environments) |
| **Operatory** | Defines the timing<br>Organizes individual/group work | Produces and shares an artifact |
| **Restructuring** | Evaluate the artifacts<br>Corrects the misconception<br>Fixes concepts through a lesson "after the experience" | Critically analyzes artifacts<br>Develops reflections on the main processes activated<br>Fixes concepts |

Table 1 - ESL method: phases and actions

The first phase is based on *cognitive anticipation* and induces a first exploration of the field, with a different level of guidance depending on the age and autonomy of the students, using the logic of "problem setting". Of course, it can also be designed as a classroom activity and with stronger guidance, to meet students' needs. We can define *cognitive anticipation* as a "prediction device": «Anticipating what will then be worked on in the classroom, from the cognitive point of view, performs the dual function of situating the student's learning and triggering the mechanism of prediction» (Rivoltella, 2014). Anticipating means providing organizers to make learning meaningful (Ausubel, 1960): this category includes indications on what will be learned later, tools to connect knowledge and to help students to better understand.

The most important elements (and attentions) are linked to four main issues.

The first refers to the definition of the *conceptual framework* (not a lesson, but the frame of the episode) lasting about 10/15 minutes. It means to create a presentation with the necessary information to proceed, without "revealing" too much of the work expected.

The second is strongly connected to the choice of stimuli: a movie clip, a short film, a TikTok or YouTube video, a poem, a mathematical problem, an image. The core is to intrigue, to make the thought move around. In the ESL perspective the focus is especially on contemporary format (Carenzio, Marangi, Ratti, 2015), to include the "native" culture of every student and to bridge school to life (formal and informal). This also means to work on languages (Cope&Kalantzis), to disassemble and reassemble the elements of our cultures (media and languages are definitely a part of it).

The third refers then to the design of tools, questions and timing to perform the activity (especially, but not only, when it is performed at home and by students alone). This aspect brings to life the importance of design for teachers and for teaching (Laurillard, 2014).

The second phase is built on *learning by doing*, as students use what they have previously built, through the production of a cognitive artifact in a small group. Theory and concepts are not treated as if they were separated from the context, abstract and inaccessible, they are part of student' experience. As Gee argued (2013), *the principle of situated meaning* helps us to understand that meaning is situated in experiences or in contexts that can enlight it, especially when it is complex and dynamic.

Again it is very important to take time for the design of this moment considering: time span, difficulty of the task linked to production (competences and skills), group matching, observation tools, areas to share the artifacts (both internal and open to others, like school mates, families, social media, websites, etc.).

The third phase is based on reflective learning: going back to what we did, fixing the main concepts, working on misconceptions, we learn from mistakes and the teacher closes the ESL with a lesson "a posteriori" (after the experience), based on what has been observed, as Freinet suggested. Teachers should pay attention to the definition of games and activities to support the discussion, to the delivery of the feedback (essential to learn) and to the use of appropriate checklists and rubrics (the perspective adopted is formative assessment or assessment as learning[3], as developed by Lorna Earl).

To make a brief final list of the main elements:

- anticipating means to give space to individual thought (free, but guided, and able to enter the daily lives of children and young people through the use of stimuli taken from contemporary media);

---

[3] Formative assessment refers to a variety of methods to conduct "in-process" evaluations of student comprehension, learning needs, and progress during a lesson, unit, or course. The goal is to monitor student learning and to provide ongoing feedback to be used to improve teaching (from teachers' side) and to improve their learning (from students' side). See Earl L. (2013), *Assessment as learning: Using classroom assessment to maximize student learning*, Corwin Press, Thousand Oaks, CA.

- producing means to build meanings and skills together with others (in the logic of the *zone of proximal development* (Vygotskij, 1978)[4] that sees peers - and teachers - as levers and pushes to grow and elaborate new thoughts collectively);
- reflecting, then, is a moment to actively return to practice in order to fix concepts, to think better and to develop the ability to take the right distance even with respect to what we have done and how we performed.

**4. The research in Italy and Spain: key findings and main changes in the ESL method**

Having in mind the main elements of the ESL method, the second step is to reflect on the changes or the confirmations when the method meets inclusion. What changes are needed? What attention should we pay? What areas of the ESL deserve a modification to meet students' needs? To answer these questions we runned a comparative research in Italy and Spain (ordinary school and special school).

In both countries the research was carried out taking into account the differences given by the different regulatory framework, with regard to the laws on the inclusion of pupils with BES, by the different school contexts (special school vs ordinary school) and by the different training of teachers. The ESL method has been identified as a model for the training of teachers in the two experimental groups and as a method to design, implement and evaluate activities in the classroom. For completeness, the methodological structure is shown in the figure below.
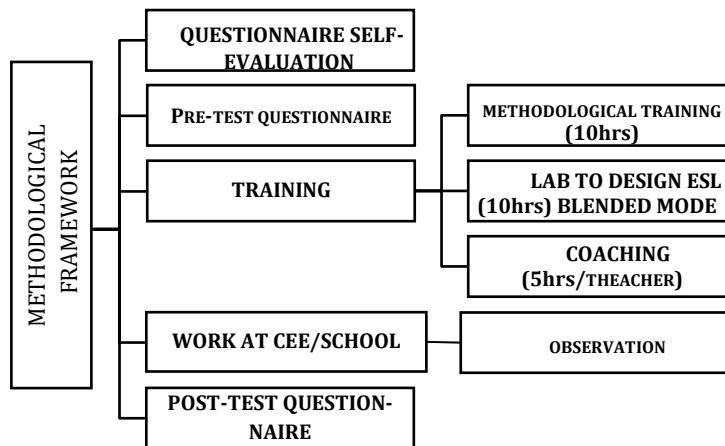


Figure 1 - Methodological framework

Specifically, the empirical study involved a group of teachers of a special school (Fray Pedro Ponce de León - Burgos) and a group of teachers attending the TFA course (Tirocinio Formativo Attivo, that is active traineeship) to be qualified as support teachers.

In the Spanish context, the training course was initiated by the research group EDINTEC (Education, Inclusion and Technology) of the Universidad de Burgos (Burgos University), with training and research activities on *ICT for disability*. In this course CREMIT (Research Centre on Media Education, Innovation and Technology based at Catholic University of Milan) has developed the experimentation of the ESL method, the specific object of the research and of this paper. Given the peculiarity of the special context, the possibility of declining this method has been widely evaluated, thus bringing a series of general adaptations such as to make the ESL method more curved and located.

Before meeting the groups, a first analysis of the ESL method has been considered: the main changes are reported in Table 2 (the deleted rows imply the elimination of the action).

---

[4] The *zone of proximal development* is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86).

| Phase | Teachers' actions | Students' actions |
|---|---|---|
| **Preparatory** | ~~Assigns tasks~~<br>Builds and exposes a conceptual framework<br>Provides a stimulus<br>~~Gives a delivery~~ | ~~Listens, reads, understands, explores~~ Performs assigned tasks<br>Follows the teacher's stimulus (created with digital tools and environments) |
| **Operatory** | Defines the timing<br>Organizes individual/group work | Produces and shares an artifact <u>with the support of the teacher</u> |
| **Restructuring** | Evaluate the artifacts<br>Corrects the misconception<br>Fixes concepts through a lesson "after the experience" | Critically analyzes artifacts (when possible)<br>Develops reflections on the main processes activated<br>Fixes concepts |

Table 2 - ESL method and special education: changes in the format

The main changes occur in the first phase of the method. If in the structure of the ESL, already flexible, this inaugural moment is based on the stimulus associated with a moment of individual/group work at home, it was necessary to reconsider the action envisaged as "individual research". This is because of a general difficulty in pupils' existing autonomy in the CEE. In order to make it possible for each pupil to carry out individual research, consideration was given to the contribution which could have been made by family members or operators[5] involved in the CEE boarding school. In this phase, the collaboration with families or operators has served, first, to propose to the pupil the stimulus prepared and presented by the teacher in the classroom, to support further reflection and deepening.

Then, the support of families and operators has returned useful to stimulate research by the student, following different activities (looking for videos, images or texts on the subject etc.) in order to better facilitate the working and deepening of the stimulus presented in the classroom.

The operative and restructuring phases, albeit with revisions due to the specificities of the pupils, maintain the general approach. Specifically, in the operating phase, the action of the student related to the production and sharing of the artifact is assisted by the teacher/classroom operator (traditionally this phase requires the student to have a high interaction without a formal intervention of the teacher who acts as "conductor").

Following the feedback obtained during the work with teachers, the ESL method for special contexts changed some more aspects, again concentrated in the first phase.

| Phase | Teachers' actions | Students' actions |
|---|---|---|
| **Preparatory** | ~~Assigns tasks~~<br>Builds and exposes a conceptual framework<br>Provides a stimulus<br>~~Gives a delivery~~ | ~~Listens, reads, understands, explores~~<br>~~Performs assigned tasks~~<br>Follows the teacher's stimulus (created with digital tools and environments) |

Table 3 - ESL method and special education: changes in the preparatory phase

Besides teachers' adjustments, the data collected with the questionnaire (delivered after the experience) and focus groups showed some interesting standpoints.

As a teacher reported: «the difficulties of our students demand our intervention to be adapted - day by day - and the phases in the ESL somehow are tricky to apply right as they are». While another teacher said that «due to these students

---

[5] The operators are internal figures of the CEE who carry out assistance tasks during the daily schoolwork and psychoeducative activities. In addition, they perform the function of supervision for pupils/patients entering the CEE who, unable to return to the family at the end of their activities, remain in a residential structure.

in particular, with so little autonomy of work, slow pace of learning and work, and lack of attention, we should be cautious»[6].

In some cases, teachers have not even been able to put into practice the skills acquired during the course and the explanation moves around a specific issue, that of the serious disabilities of the students: teachers whose activity aims to students' health (logopedic, psychomotor).

In other cases, it has not been possible to work with all the students, but the results obtained allow to recognize high degrees of reliability of the ESL method.

Some of most outstanding statements by teachers help us to understand the relevance of the method:

- «content and objectives can be adapted to each student and the group (...), it is a motivating methodology for students»,
- «because it is very participatory and individualized»,
- «ESL design is very simple and allows an adequate level of customization of the contents»,
- «it is a very agile and attractive sequence to draw attention to learning»,
- «the activities can be adapted to the levels of the students, it works».

Assertions that clearly lead to considering the method also for students having very serious cognitive deficits.

A second component is related to the motivating function of the method, which is also transversally identifiable in the use of technology and in the transition from being users to becoming "knowledge/content creators". The specific question is: "by experimenting with ESL in the classroom, have you noticed an improvement in the motivation and learning of your pupils?". 10 out of 11 teachers in the Spanish group answered the question affirmatively, the only critical voice regards digital technology, which is somehow less accessible than other mediators. The situation is very similar if we approach the Italian group, in which almost all of the 29 teachers experienced an improvement.

## 5. Final remarks: adjustments and confirmations

Some of the key issues concerning inclusion at school refer to at least three issues:

- students' motivation;
- personalization (that means to consider students for their needs and attitudes, as they are all "special" in some way);
- the right to be part of the community, no matter the conditions we are living in (permanent or not).

To which extent can the ESL method match these issues, support teachers and help students to learn in an inclusive environment?

Considering motivation, the narration around school and education often tells that school is boring and does not meet students' needs and interests. Well, the aim of the article is not to debate this issue, but for sure using digital media to produce artifacts, practicing group works and selecting specific stimuli to start the episode of situated learning can be supportive. And, not to forget, it provides the occasion to share, to discuss, to work with classmates, to be a group and to work on *peer learning* and *reciprocal teaching*.

The second issue refers to personalization and can be described as the definition of settings, strategies, tools, mediations and stimuli that suits different conditions and situations, in terms of learning and in terms of living conditions.

Every single episode can embrace very different and personalized steps: for example in the anticipation, I can provide different stimuli according to students' skills and behaviors, but also different questions or forms to make them comfortable with the situation and give different prompts.

---

[6] Quotations come from the questionnaire delivered at the end of the experience.

In the operative moment, teachers and operators can imagine groups with students who can help each other, attributing specific roles to specific students (again, respecting skills, abilities and styles). Or, teachers can imagine different artifacts with different levels of difficulty or skills required, where every artifact is part of a process.

In the reflective moment, the lesson is set after the experience, that means that it does not answer to the "one size fits for all" mode, but teachers can recall, remark or go in depth regarding some elements that have proved to be particularly difficult or tricky. And last, using checklists and rubrics can help teachers while assessing and evaluating students' performance and achievements. Besides, to personalize means to start with a topic connected to students (and closed to them, to their interests) and to accompany learning - step by step - with appropriate resources, such as *job aids* shared with students (a job aid is a prop, a tool helping students during the activity, such as examples, a list of actions, a catalog of questions).

The third, then, is connected to the right to be part of a community (my class, my mates, my friends) and to express ourselves, without any boundaries. Considering the "hands on" approach of the method, where everyone can contribute, it is clear that the ESL method can support participation and belonging, especially in situations considered as not-standard. These are situations where teachers should be more similar to Mary Poppins and her bag full of stuff and strategies, than an adamant and prescriptive Rottenmeier teacher.

Last but not least, these are situations where time is precious and cannot be dissipated: the fact that the episode is brief helps attention, time management and productivity, using what we have (a device, a smartphone, a book, articles, movies etc.).

Even when teachers in the research did not manage to develop a complete episode of situated learning, the structure of the anticipatory and operative phase allowed them to improve the presentation of the activities, specifically in classroom activities based on practice.

As Pier Cesare Rivoltella - father of the ESL method - recently wrote, «ESL worked well for inclusion. From what we had seen and understood working side by side with the teachers, the reason must be sought in the flexibility of the ESL, in its scalability, or in the possibility offered to imagine paths and differentiated activities that insist on the same construct and the same theme»[7].

## References

Altet M. (1994), *Les pédagogies de l'apprentissage*, PUF, Paris.

Carenzio A. (2016), *Microprogettare nel metodo EAS*, in P. G. Rossi, C. Giaconi, *Micro-progettazione: pratiche a confronto. PROPIT, EAS, Flipped Classroom*, FrancoAngeli, Milano.

Carenzio A. (2021), *Flipped learning e metodo EAS* in Rivoltella P. C. (a cura di). *Apprendere a distanza. Teorie e metodi,* Raffaello Cortina, Milano.

Carenzio A. (in corso di pubblicazione), *La microprogettazione: il lesson plan e gli EAS*, in Rivoltella P. C., Rossi P. G. (a cura di), *Nuovo Agire didattico*, Morcelliana, Brescia.

Carenzio A., Marangi M., Ratti C. (2015), *Linguaggi e formati*, in Rivoltella P.C., Ottolini G. (a cura di). *Il tunnel e il kayak. Teoria e metodo della peer & media education*, FrancoAngeli, Milano.

Cope B., Kalantzis M. (2000), *Multiliteracies. Literacy Learning and the Design of Social Futures*, Routledge, London.

Cope B., Kalantzis M. (2009), "Multiliteracies. New Literacies, New Learning", Pedagogies: An International Journal, 4, 3.

Dewey J. (2004), *Democrazia ed educazione*, Sansoni, Milano.

Earl L. (2013), *Assessment as learning: Using classroom assessment to maximize student learning*, Corwin Press, Thousand Oaks, CA.

Gee J.P. (2013), *Come un videogioco. Insegnare e apprendere nella scuola digitale*, Raffaello Cortina, Milano.

---

[7] Rivoltella P. C. (2022), *Prefazione*, in Messina S., *Progettazione e valutazione inclusiva con gli EAS. Metodologie, ricerche, strumenti*, Aracne, Roma, p. 10.

Glasersfeld E. von (1998), Anticipation in the Constructivist Theory of Cognition. Computing Anticipatory Systems, AIP Conference Proceedings 437, American Institute of Physics, Woodbury, pp. 38–47.

Laurillard D. (2014), *Insegnamento come scienza della progettazione. Costruire modelli pedagogici per apprendere con le tecnologie*, FrancoAngeli, Milano.

Messina S. (2022), *Progettazione e valutazione inclusiva con gli EAS. Metodologie, ricerche, strumenti*, Aracne, Roma.

Messina S., Lezcano Barbero F., Casado-Muñoz R. (2017). Episodios de aprendizaje situado (EAS) y tecnologías de la información: Formación del profesorado para la atención a la diversidad. *XIV Congreso Internacional de Educación Inclusiva y las XXXIV Jornadas de Universidades y Educación Inclusiva*, pp. 1735-1742.

Mishra R.C. (2009), *Lesson Planning*, APH Publishing Corporation, New Delhi.

Rivoltella P.C. (2013), *Fare didattica con gli EAS. Episodi di Apprendimento Situato*, La Scuola, Brescia.

Rivoltella, P. C. (2014). Episodes of situated learning. A new way to teaching and learning. REM Res. Educ. Media 6, 79–88.

Rivoltella P.C. (2015), *Didattica inclusiva con gli EAS*, La Scuola, Brescia.

Rivoltella P.C. (2016), *Cos'è un EAS. L'idea, il metodo, la didattica*. Morcelliana, Brescia.

Terrenghi I, Diana B, Zurloni V, Rivoltella PC, Elia M, Castañer M, Camerino O and Anguera MT (2019), Episode of Situated Learning to Enhance Student Engagement and Promote Deep Learning: Preliminary Results in a High School Classroom. Front. Psychol. 10:1415. doi: 10.3389/fpsyg.2019.01415.

Vygotskyj L. (1978). *Mind and society: The development of higher psychological processes*, Harvard University Press, Cambridge, MA.

Wiggins G., McTighe J. (2005), *Understanding by design,* ASCD, Alexandria, VA.