ACCESSIBILITY FOR INCLUSION AND WELL-BEING IN THE CLASSROOM

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Abstract: This paper is a discussion of technology and teachers preparation about classroom management, differentiation and inclusion. Recently the role of teaching and educating the youth has become more difficult then in the past. In the classroom leave all togheter: students with different approaches to learn, students with disabilities and special needs or dyslexia. Every student needs a specific approach to have a good experience at school. The role of teachers is central to promote inclusion, access, creativity for all and also well-being in the classroom. Every student deserve a teacher who understand the power of UDL (Universal Design for Learning) and Technology that allows to every student to overcome their difficulties determined by their disabilities. Technology can support teachers to teach more inclusively and represent a tool to promote effective learn for all. Technology solutions, in fact, allow to personalize the approach to learning and make the teaching and learning process more interactive and immersive. When students are more engaged they are more motivated and, consequently, they perform better.

Keywords: Accessibility, Inclusion, Special Education, Technology

Introduction

Nowadays educating the youth has become more difficult then in the past: classroom management is a challenge that many teachers constantly face (Carruba, 2016). They must be ready to guide all students in the class, also students with disabilities or difficulties, to be able to learn, to work hard and become their best version, to take part to the lesson and the teaching-learning process, to be motivated and interested.

Schools must be inclusive and able to promote social equity: to achieve these goals, schools deserve teachers able to include all students, to promote a context where everyone can be active and pro-active, to find solutions to overcome their students' difficulties determined by their disabilities. The role of teachers is getting harder especially considering the complexity of today's society. In today's difficult situation, classroom management can be a solution to support teachers to teach in the best way and represents a set of effective strategies to guide the class and promote the interests of all students also in order to respect the values of the Universal Design for Learning (Carruba, 2016). Theachers, as more studies have shown, play a fundamental role in the cognitive, social and emotional development of their students and thanks to classroom management strategies they allow every student to really learn and to improve their skills. A positive classroom environment encouraging effective teacher-student relationships.

Evertson and Weistein (2016) describe the classroom management as a set of actions to support every students in the learning process. They explain five actions that allows teachers to manage successfully the classroom:

1. developing supportive relationships with and among students;
2. organizing the activity and giving clear instructions;
3. using group management and cooperative learning methods;
4. employing appropriate interventions to support students with behavior problems;
5. promoting an ongoing interaction between teachers and their students.

The classroom management is not only a way to teach but, as Kounin wrote, give to teachers a set of strategies to promote students' engagement based on these techniques:

- withitness (teachers' ability to know what was going in classroom);

- overlapping (being able to present a new topic while preventing misbehaviors);
- momentum and smoothness (to be able to "roll-with-the-punches" and to keep on a plan or course action);
- focus group (the ability of teacher to engage the whole class).

In addition, in effectively managed classrooms it is necessary to establish:

- clear rules and procedures;
- disciplinary interventions;
- teachers-students relationships;
- mental set   (that includes two aspects: 'withitness' and 'emotional objectivity') .

All these strategies allow teachers to catch students' interest e promote learning.
In the classroom, nowadays, we have students that live continuously in a digital context and spend more time using technology in their daily living. In recent years, digital skills has become important also in the schools.
How is possible use technology solutions in the classroom during the lesson?
How technology can support teachers and students in the teaching-learning process?
How technology can promote inclusion and can support students with disabilities or difficulties?

These questions moves the pedagogical reflections about the partnership technology- education.
Technology and Special Education can work together having focus on:
- users experience;
- accessibility;
- classroom and learning context design;
- creativity for all.

Furthermore, technology allows moreover to differentiate the activities according to specific students' need. Using technology, teachers can help students with disabilities, students with dyslexia, students that have different approaches to learning. That's why it is important to apply different technology tools for education so that each teaching style can match each individual learning style.
Nowadays, technology is present in schools but, as some studies prove, often teachers didn't receive a correct training and so they're unable to use these tools in the most appropriate way; on the other side, also students are able to use technology for their free time, but lack the essential skills to apply technology to the learning process.
Technology changes the way to learn if teachers use it with an inclusive approach.
When students with disabilities thanks to technology overcome their difficulties, they feel better in the classroom and, it works good also for teachers. Technology could provides innovatives solutions for mobility, hearing speech and other everyday needs and support students with disabilities enjoy the most active role in the classroom.
Every school deserve technology but not because it is the New or because it is fashionable... but because it could be the future for the inclusion.

Materials and Methods

This research focuses on:
    1. Classroom management;
    2. Differentiation and Universal Design for Learning;
    3. Special needs, Technology and inclusion in the classroom.

Using technology for inclusion every schools could be a place for social equity and allow students, also with disabilities or disturb, to really learn, to be able to develop transversal life skills, to find opportunity to be active and feel well in every context.

Goals of the study:
- Analysis of education technology policies and legislation in Italy;
- Analysis of teacher competences and knowledge on the use of educational technology for increased inclusive education;
- Comparative studies with UK and USA about AT;
- Know-how Neuroscience: how technology impacts on the whole learning process and the perception of self-competence in students with disabilities including learning disabilities;
- Analysis of accessible technology.

Methodology:
- Research tools: questionnaire and interviews;
- Population: primary , middle and secondary schools, Universities, teachers, parents, students (In Italy)
- About comparative studies in USA and UK: personal experience and research collected.

Results and Discussion

In the field of education, the well-being of students is a necessary condition to make them feel included, accepted, part of the class and therefore ready to learn.
Expected results:
- Identify educational technology suitable and effective for students with disability;
- Identify educational technology to supports teachers in implementing inclusive education;
- Identify mobile apps relevant for inclusive education and classify them according to different factors: disability, activities(writing, reading, calculating, daily life...etc etc);
- Best practices on how to use educational technology as a facilitator tool in inclusive education.

Technology isn't the only solution to difficulties we are facing in schools nowadays, but might be one of the solutions that teachers can apply in their didactical activities. Technology is a good way for, and it is therefore important for teachers to learn to use it. Technology is not very widespread in schools: this happens because teachers lack the right tools (or maybe an internet connection), because they lack the right skills or just ignore the full potential of technology. In the hands of a well-trained teacher, technology, allows to achieve a school opened to everyone, also for students with disabilities or specific needs.
In recent years more researcher in different discipline has become interested in technology. One need only think, for example:
- Psychology and human and computer interaction;
- STEM (Science, Technology, Engineering and Math) education and the lack of competitiveness;
- Cultural anthropology and relationship technology / "homo faber";
- Education and technology for learning;
- Special Education and technology for inclusion.

One charpter in my research talk about iPad for inclusion. Nowadays more italian schools use iPad in the classroom. Sometimes thanks to some teacher who loves technology or has understand the power of technology in the teaching-learning process.
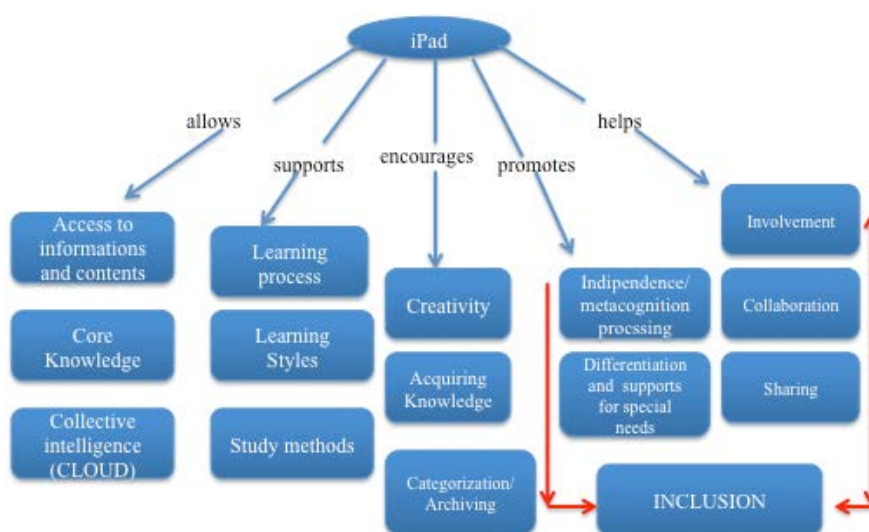

Fig. 1 Ipad inclusive and pedagogical approach

Samples:
- 2 classes of Primary School;
- 2 classes of Middle School;
- 2 classes of Secondary School.

The team chooce the classes using this prerequisites:

- teachers used iPad for 2 years at least;
- teachers have good preparations in classroom management;
- in the classroom there's students with special needs;
- Teachers started a collaboration with our Research Center (CeDisMa), to be sure they have the same pedagogical approach about inclusion.
- Project started with a meeting when I explained to all teachers Accessibility session in the iPad (visual impariments, hearing impaiments, motor disability, dyslexia and other). Pratical session to introduce iPad to support all students, including students with disabilities.
- Training Areas:
- Presentation of the contents during the teaching-learning process;
- Taking notes;
- Making concept map;
- Using creativity;
- Monitoring/ Considering/ Evaluating.
- The Tools to support theachers during the project are:
- Teachers' Inclusive lesson plan template;
- Monitoring plan for students;
- Guidelines that help them in using the tools (including icon tools).
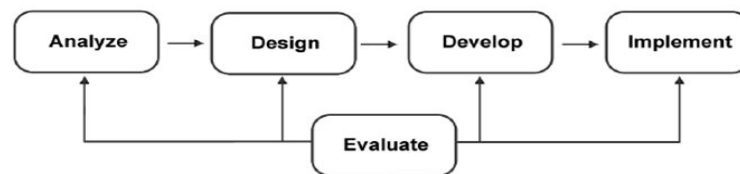

Fig. 2 Reference model ADDIE

This is a model borrowed from Engineering and Instructional Design, that fits really good in the teaching-learning process through technology. Also teachers, in fact,   need to identify customers (students) needs.

Current State:

- 61 Teachers' Inclusive lesson plan template received as below:
  - 30 from Primary School
  - 23 from Secondary School
  - 8   from Upper Secondary School;
- 698 Monitoring plan for students received as below:
  - 416 from Primary School
  - 180 from Secondary School
  - 102 from Upper Secondary School

Sythesis about the analisys of data collected until July 2017:

1. Both Teachers and Students feel more competent during the teaching- learning when schools use inclusive approach;

2. iPad isn't the only solution to difficulties we are facing in schools nowadays, but might be one of the best solutions that teachers can apply in their didactical activities;

3. Accessibility section allows all students, also with special needs, to differentiate and to customize the contents as they deserve;

4. Accessibility section allows all teachers to meet students needs and to avoid to prepare the same content in more different ways. One tool, more ways to learn.

Conclusion

In the classroom live all togheter:
- students with different approaches to learn;
- students with disabilities;
- other special needs;
- Learning disabilities or dyslexia.

Every student needs   a specific approach to have a good experience at school. The role of teachers is central to promote inclusion, access, creativity for all and also wellbeing in the classroom.

Every student deserves a teacher who understands the power of UDL and Technology that allows to every student to overcome their difficulties determined by their disabilities.

Technology can support teachers to teach more inclusively and utilize a tool to:
- promote effective learn for all;
- allow to personalize the approach to learning:
- make the teaching and learning process more interactive and immersive.

When students are more ingaged they are more motivated and, consequently, they perform better.

Also students with disabilities or disturb deserve to be included, motivated, supported and to have a chance to enjoy their life. Despite disabiliry or disturb.

In the field of Special Education, researchers and teachers deserve a technological and digital competence to improve their students' with special needs skills to use technology in the school, at home, and also in daily living. Using technology allow teachers to be able to support their students, also students with disabilities in an inclusive and innovative way. The integration of technology into science curricula is a way to enhance or support student learning (Hoda et all, 2016) and for teachers who must learn how to implement and promote productive use of these in the classroom (Lawless & Pellegrino, 2007). In the Mishra & Koehler' vision (2006) , technological and digital competence is a fundamental skills for teachers to be successful and promote inclusion.

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