Introduction to the soft skills in HE

Communication and stakeholders: who and how

prof. Alessandro Silvestri

Short Biography about Soft Skills (1/2)

ANVUR - ITALIAN NATIONAL AGENCY FOR THE EVALUATION OF UNIVERSITIES AND RESEARCH INSTITUTES
In the list of Disciplinary Experts and in the list of TECO (TEst on COmpetences) Experts; member of the work group TECO-T Numeracy

CRUI Foundation - THE CONFERENCE OF ITALIAN UNIVERSITY RECTORS
Member of the work group University-Companies on soft skills

UNICAS – University of Cassino and Southern Lazio
Responsible of the entrance test for matriculation supported by CISIA – Interuniversity Consortium Integrated Systems for Access

Responsible of the course financed by Lazio Region and EU: *Competences for competing*

Co-Responsible of the project financed by MIUR - Ministry of University and Research: *HE4SS – Higher Education for Soft Skills*

Member of the following international projects on the competences development:
- INNOLNFORM PROJECT "LIFELONG LEARNING IN SMES"– NEUBRANDENBURG – Neubrandenburg – GERMANY
- ISAIA PROJECT – Plovdiv – BULGARIA Integration of Environmental Protection and Company Innovation
- Competence Eurovision – Scheveningen – OLAND

Author of the following international articles:
- *HIGHER EDUCATION FOR SUSTAINABILITY COMPETENCES MODEL.* Silvestri, A.; Sannella, A.; Esposito, M. (2021). European Proceedings of Social and Behavioural Sciences EpSBS *Article in press*
- *THE "ABC-COMPETENCE" MODEL FOR NON-FORMAL COMPETENCES CERTIFICATION.* Falcone D., Silvestri A., Cerbaso C., Forcina A., Di Bona G. (2014). TOJNED - The Online Journal of New Horizons in Education Volume 4, Issue 4, ISSN: 2146-7374
- *PROPOSAL OF A METHODOLOGY FOR NON-FORMAL COMPETENCES CERTIFICATION.* Silvestri A., Falcone D, Cerbaso C, Forcina A, Di Bona G. (2013). ICQH 2013 – International Conference on Quality in Higher Education. Sakarya, Turkey, December 12-14, 2013 P. 640-653

- *THE CHALLENGE OF CHANGE*

- *STEM AND SOFT SKILLS*

- *INDIVIDUAL AND TEAM WORKING*

- *MEETING*

- *BRAINSTORMING*

DID YOU KNOW 2019:

https://www.youtube.com/watch?v=bTM06NZOyDQ&ut=

Some amazing facts about the
1. Digital World,
2. Information Technology Evolution,
3. Changes in Society and Business World.

The digital world has experienced spectacular growth in the last years with exponential technology advances like robotics, internet of things, Smart cars, robotics, 5G, Smart cities, artificial intelligence or quantum computing.
THE CHALLENGE for people, the society, governments and businesses is to face the implications of digital change.

1. Digital World

6

481,000 Tweets are sent per minute

692 million Tweets per day

38 million messages per minute

54 billion messages per day

Facebook has more than +2.2 billion Active Users, who have an average of 155 Friends

Fortnite, a free to play game, launched in 2017 now has 200 million Players, and +$2 billion in revenue

Your e-REPUTATION & Privacy

Worst Enemies:

2. Information Technology Evolution

90% of the **World's Data** has been created in the **last couple of years**

In **2018**, **+4.5 Billion** Data Records were exposed, in more than **900 Data Breaches**

Augmented & Virtual reality are rapidly evolving technologies

Artificial Intelligence will Outperform Humans in many Activities in the next 10 years

IBM just unveiled one of the world's first commercial **Quantum Computers**

It will enable **Exponential** Jumps in **Computing Power**

5G Mobile Internet will be commercially available in 2019,

enabling faster and more secure mobile connections

5G

In 2013, **Amazon** had **1,000 Robots** operating in its Warehouses

Now, **Amazon** has **100,000 Robots** across **26 Warehouses**

50% of Current Work activities are technically automatable

Robots will displace 75 million jobs globally by 2022,

but create 133 million new jobs

3. Changes in Society and Business World

17

The amount of **New Technical Information** is **Doubling every 2 years**

For **Students** Starting a **Four-Year Technical or College Degree,** **This means that…**

Half of What **They Le**arn in Their
First Year of Study
will be **Outdated**

By Their **Third Year of Study.**

The following Top in-demand Jobs today
That **barely existed 10 Years Ago**

Digital Marketing   **Uber Driver!**

Cloud Specialist   **Data Scientist**

Blockchain Intern   **Big Data Architect**

Fintech Manager   **iOS and Android Developer**
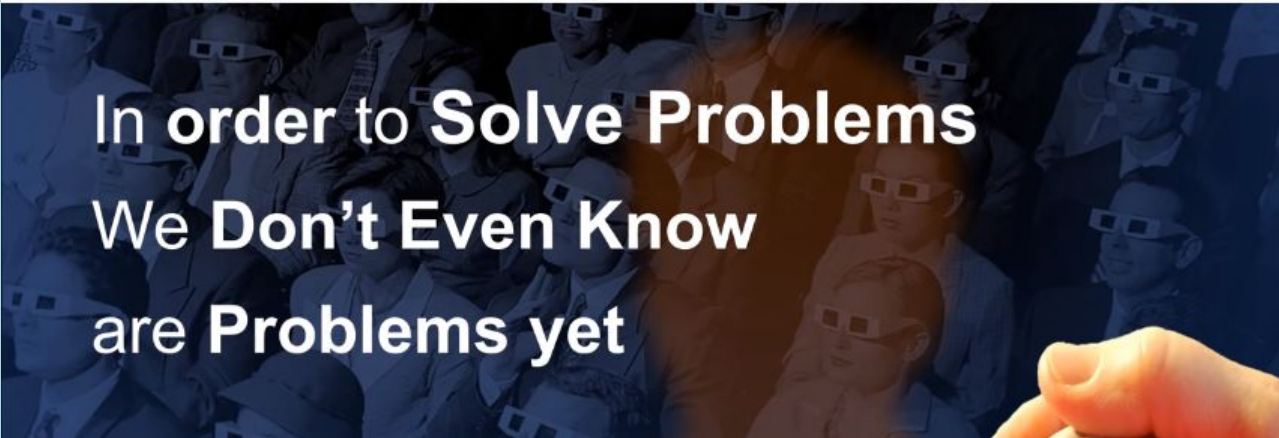
Transformation Manager

THE CHALLENGE of CHANGE

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We are currently preparing Students for Jobs that Don't yet Exist…

Using Technologies that haven't been Invented…

In **order** to **Solve Problems** We **Don't Even Know** are **Problems yet**

	TOTALE
Comunicare in italiano informazioni dell'impresa	67,8
Comunicare in lingue straniere informazioni dell'impresa	47,6
Utilizzare linguaggi e metodi matematici e informatici	51,4
Utilizzare competenze digitali	58,7
Applicare tecnologie "4.0" per innovare processi	36,3
Lavorare in gruppo	85,4
Problem solving	79,1
Lavorare in autonomia	81,7
Flessibilità e adattamento	95,3
Risparmio energetico e sostenibilità ambientale	78,8

2° Team working

4° Problem solving

3° Autonomy

1° Flexibility

5° Energy and Sustainability

S.T.E.M. (HARD) SKILLS:
- *SCIENCE*
- *TECHNOLOGY*
- *ENGINEERING*
- *MATHEMATICS*
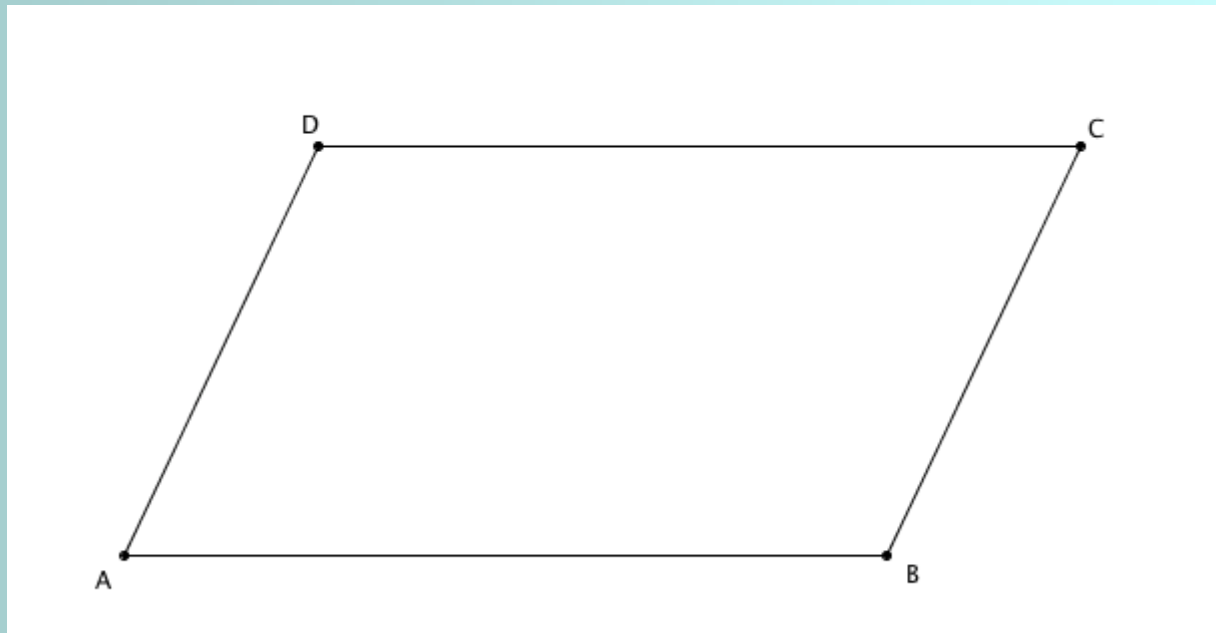
SOFT SKILLS:
- *FLEXIBILITY*
- *TEAM WORKING*
- *AUTONOMY*
- *PROBLEM SOLVING*
- *ENERGY AND SUSTAINABILITY*

DEDUCTIVE MIND
"BOXES OF THE PAST"
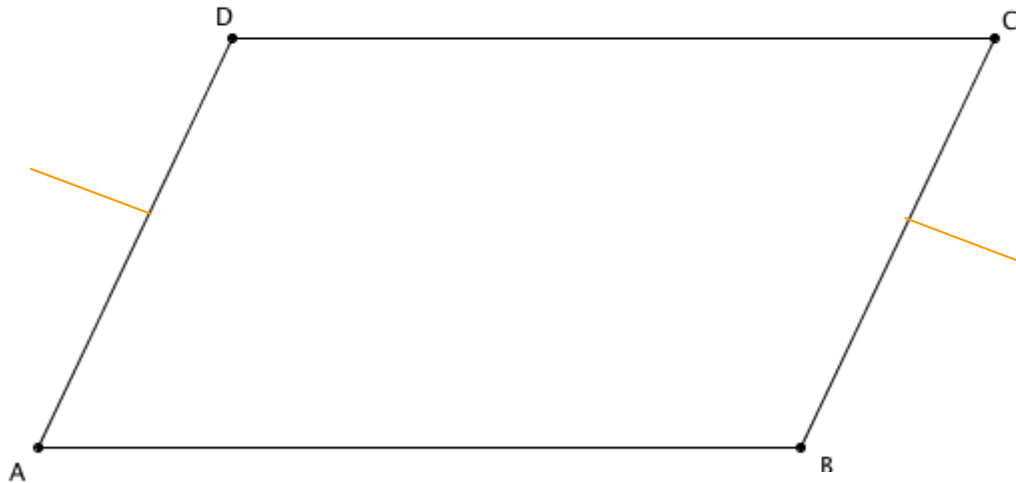**INDIVIDUAL WORKING**
FOR OLD PROBLEMS

VS

INDUCTIVE MIND
"OUT OF BOXES"
TEAM WORKING
FOR NEW PROBLEMS

draw the perpendiculars to the oblique sides of the figure

SOLUTIONS

DEDUCTIVE MIND

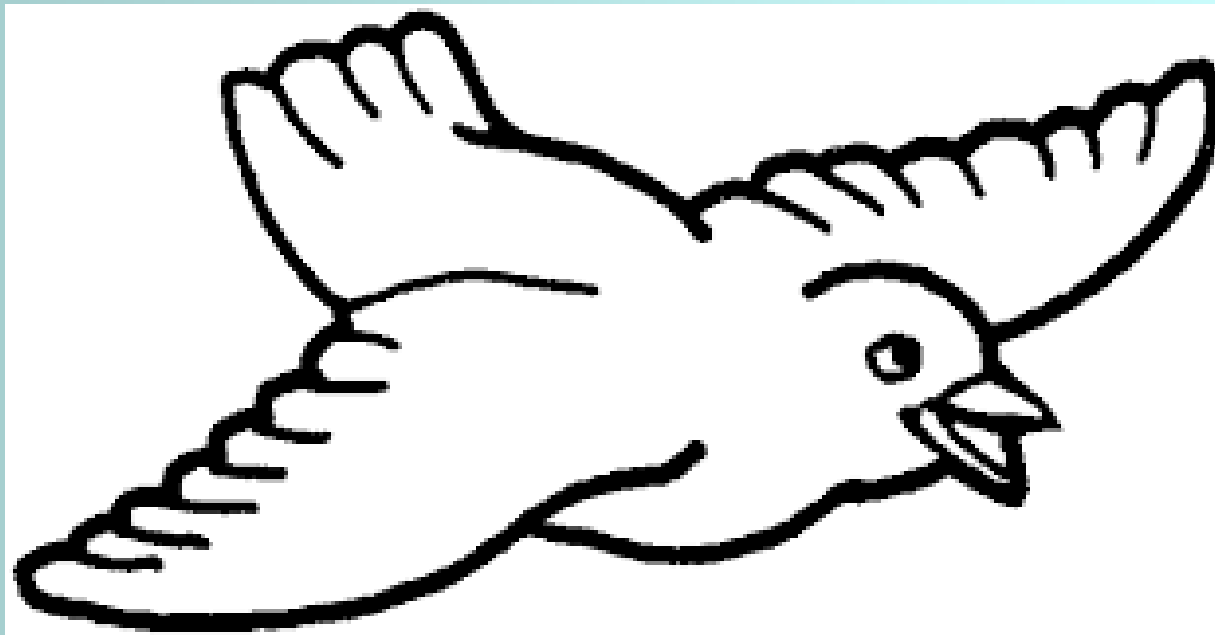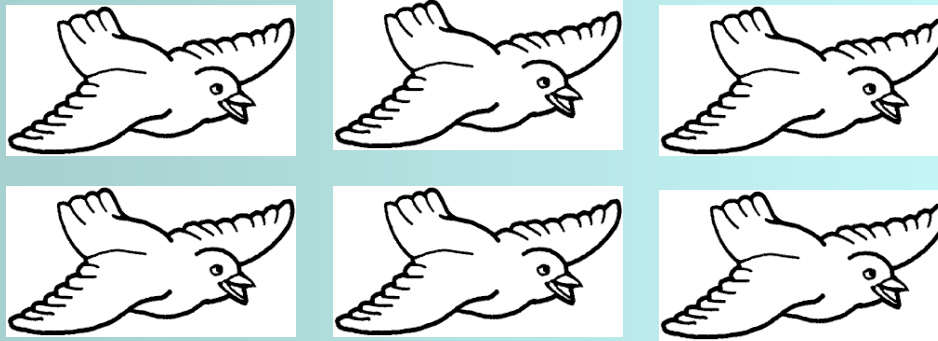*INDUCTIVE MIND*

draw two birds flying in front of two birds,
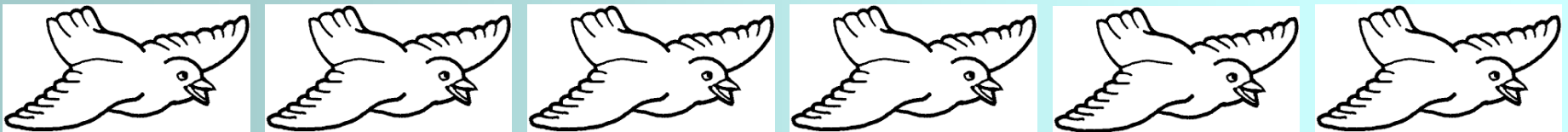two birds flying behind two birds and
two birds flying in the middle

SOLUTIONS

DEDUCTIVE MIND
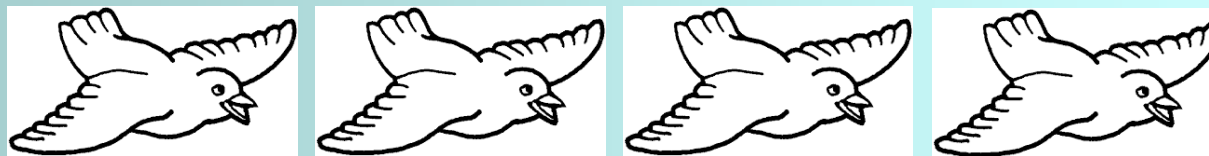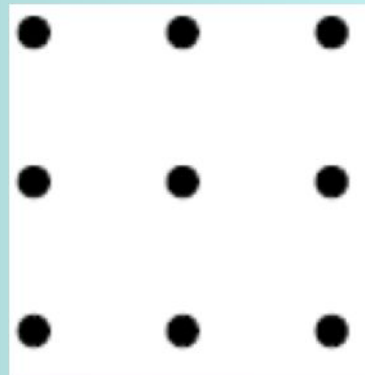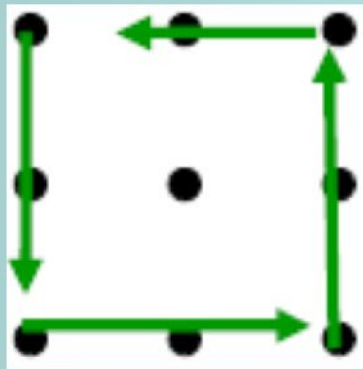

OR

INDUCTIVE MIND

**connect all the 9 dots with only 4 straight segments
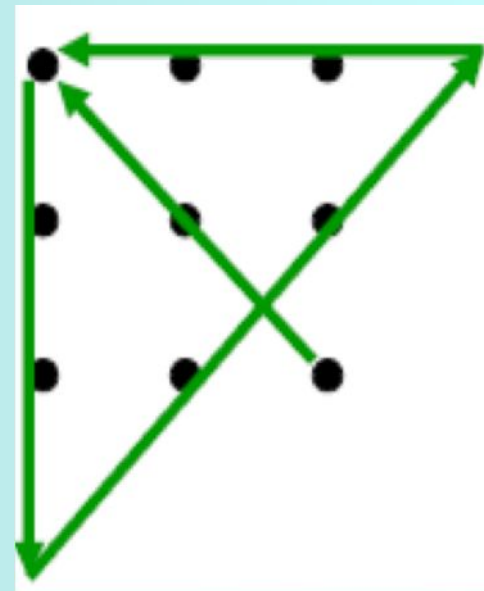without removing the pen from the paper and without going back**

SOLUTIONS

DEDUCTIVE MIND

INDUCTIVE MIND

TEAMS WIN INDIVIDUALS IN SOLVING NEW PROBLEMS

A TEAM IS MORE ABLE THAN AN INDIVIDUAL TO MOVE FROM A DEDUCTIVE MIND PROCESS TOWARDS A INDUCTIVE MIND PROCESS TO BREAK OLD PATTERNS AND SOLVE NEW PROBLEMS

Decalogue (1/2)

1) To be short (180 minutes maximum with rests every 60-90 minutes)

2) To be preceded by the preparation of the information about the topics of interest, sent to the meeting participants with sufficient time for them to familiarize themselves with the process

3) To respect the topics previously drafted

4) To be managed by a facilitator, helped by a scribe

5) Do not allow the occurrence of lengthy discussions on a single specific topic

Decalogue (2/2)

6) Do not tolerate a series of bilateral talks between the participants replacing the whole group discussion

7) Help constructive criticism, reject useless criticisms

8) Do not allow individual members to be blamed for their opinion

9) Do not allow the meeting to end without the necessary decisions and postpone future decisions to the next meeting (meeting schedule)

10) Be sure that each participant in the meeting carries with him all the information of his competence ("A redundancy of information is just as damaging as a deficiency")

Decalogue (1/2)

1) List all the ideas proposed by the members of the group

2) Do not evaluate or judge ideas as they emerge

3) Do not discuss the ideas immediately, except to clarify their understanding

4) Accept all suggestions

5) Don't waste time verifying repeated ideas

Decalogue (2/2)

6) Encourage quantity

7) Do not be anxious to close the proceedings

8) Rest if no more ideas come out ("enjoy your coffee")

9) Restart

10) Discuss the ideas that emerged, eliminating the rejected ones, in search of useful ones