



**IMT Atlantique**

Bretagne-Pays de la Loire  
École Mines-Télécom



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# CO-ORIENTATION: AN INNOVATIVE METHOD TO HELP STUDENTS CHOOSE THE RIGHT FIRST JOB

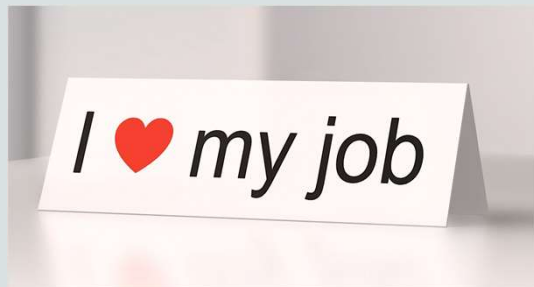
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**Virtual conference**

**Nathalie CHELIN – Siegfried ROUVRAIS**



# SUMMARY

1. **P3 & P4** : VUCA CONTEXT AND STUDENTS' DIFFICULTIES IN MAKING CAREER DECISIONS.
2. **P5 TO P8** : CO-ORIENTATION METHOD.
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# VUCA CONTEXT AND CAREER DECISION MAKING



- **The world is complex, with a multiplex of forces and no cause-and-effect chain**
  - For future engineers: being prepared to make decisions in Volatile Uncertain Complex Ambiguous environments is important for them throughout life (**career, re-orientation, employability**).
- **VUCA conditions strongly affect decision-making capacity**
  - Understanding VUCA characteristics and sources, their effects on Decision Making processes (**management situation, crisis, change, etc**).
- **Reliability depends on the ability of people**
  - to anticipate and cope with unexpected situations

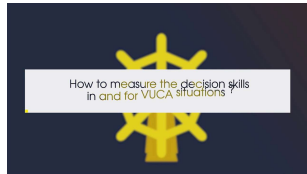


<b>complexity</b> <small>Characteristics:</small> The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process. <small>Example:</small> You are doing business in many countries, all with unique regulatory environments, tariffs, and cultural values. <small>Approach:</small> Restructure, bring on or develop specialists, and build up resources adequate to address the complexity.	<b>volatility</b> <small>Characteristics:</small> The challenge is unexpected or unstable and may be of unknown duration, but it's not necessarily hard to understand; knowledge about it is often available. <small>Example:</small> Prices fluctuate after a natural disaster takes a supplier off-line. <small>Approach:</small> Build in slack and devote resources to preparedness—for instance, stockpile inventory or overbuy talent. These steps are typically expensive; your investment should match the risk.
<b>ambiguity</b> <small>Characteristics:</small> Causal relationships are completely unclear. No precedents exist; you face "unknown unknowns." <small>Example:</small> You decide to move into immature or emerging markets or to launch products outside your core competencies. <small>Approach:</small> Experiment. Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.	<b>uncertainty</b> <small>Characteristics:</small> Despite a lack of other information, the event's basic cause and effect are known. Change is possible but not a given. <small>Example:</small> A competitor's pending product launch muddles the future of the business and the market. <small>Approach:</small> Invest in information—collect, interpret, and share it. This works best in conjunction with structural changes, such as adding information analysis networks, that can reduce ongoing uncertainty.

By Nathan Benett & G. James Lemoine

... the Right Decisions at the Right Times !

# LEARNING OUTCOMES FOR DECISION MAKING



Decision making skills : Inspired by the CDIO syllabus (Crawley et al., 2011) and the ENAEE requirements for graduate engineering profiles (ENAEE, 2017).

- D1 Recognise and consider the VUCAity of a family of situations**
- D2 Analyse VUCA situations**
- D3 Make a judgement in VUCA situations**
- D4 Face complexity of VUCA situations**
- D5 Organise and implement actions in VUCA situations**
- D6 Take responsibility in the decision process in VUCA situations**
- D7 Learn from your own experience in VUCA situations**



# Co-orientation concepts



A peer-to-peer pedagogy, '**learning for everyone, by everyone of almost anything**' [Jeff Brazil, May 23, 2011]

**'Mirror effect'** or **'co-development with peers'** with benevolence.

[A. Payette, 'le groupe de co-développement et d'action formation, une approche puissante encore méconnue' Effectif Vol 3, n°2, 2000]

**Self-awareness, self-regulation, motivation**, empathy, and social skills, at appropriate times and ways and in sufficient frequency to be effective in the situation' [D.Goleman, 'Working with emotional intelligence'. New York, NY: Bantam Books, 19981998]

**Positive cognitive psychology** [M. Seligman, 'Vivre la psychologie positive', Stock 2016]

**NVC: Non-Violent Communication** [Marshall B. Rosenberg, La communication NonViolente au quotidien, éditions Jouvence. (ISBN 2-88353-314-8)]

# M1&M2 STUDENT QUESTIONS AND MOTIVATION TO 'GO' !



*'I do not know what I want to do when I reach the end of the course.'*

*'The labour market is complex and volatile, how do I envisage my career?'*

*'I am a general engineer but without a privileged field, which profession should I choose?'*

*'What motivates me and makes me want to go to work every day?'*

*'Would this opportunity suit me?...making a judgement is difficult.'*

*'How to make decisions?'*

*'Am I allowed to make professional mistakes?'*

Shape  
your life  
plan

Easier to  
make  
career  
decisions

Help and  
be helped

Take a new  
look at myself  
and others.

Have more  
opportunities

Develop my  
professional  
network



# INTRODUCTION TO THE METHOD



Orientation + co-development  
= **co-orientation**



**Professions are evolving with a rapid economic and social context.**

- The career is no longer linear but rather nomadic, consisting of periodic moments of unemployment and changes in orientation are becoming normal.

**In the VUCA world, a career becomes a succession of trades in reaction to the job market, downsizing measures, mergers and acquisitions of companies, change, crisis, etc.**



## Characteristics and pedagogical framework

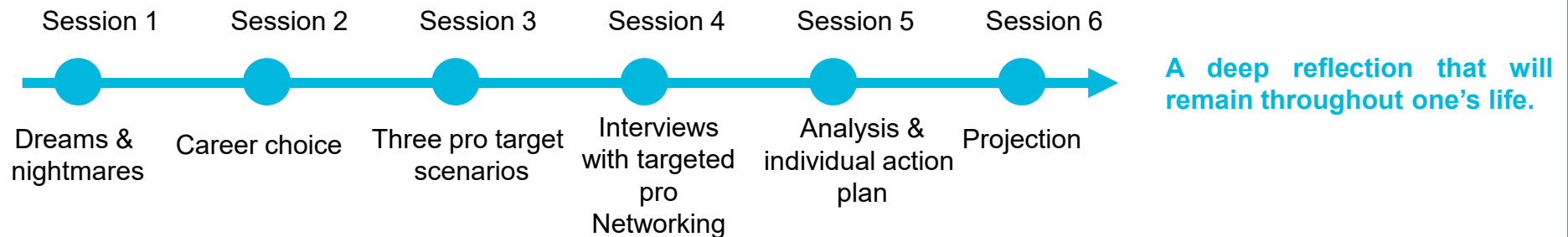
A **reflection-action** on each individual's values, aspirations and singularities in order to define in which environment to flourish on a professional level according to personal constraints.

Principle of **co-development** to help each other in a spirit of trust.

Group of 5 to 6 students with the same expectations and a minimum coach.  
"**Mirror effect**" with **benevolence**: it is a **group dynamic** that allows each students to discover the richness of the others' thoughts. Thus, **everyone asserts their singularity**.  
The **Coach** is an **Alumnus**.



## Innovative method in 6 sessions, 40 hours over 12 weeks





# SIX-STEP INTERACTIVE COACHING

Shared ideas



Figurative posters



Alternative roles: Coach / coachee in the group



Positive exchanges



Clarified vision



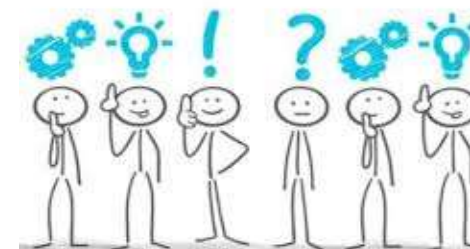
Constructive Feedback



Teambuilding

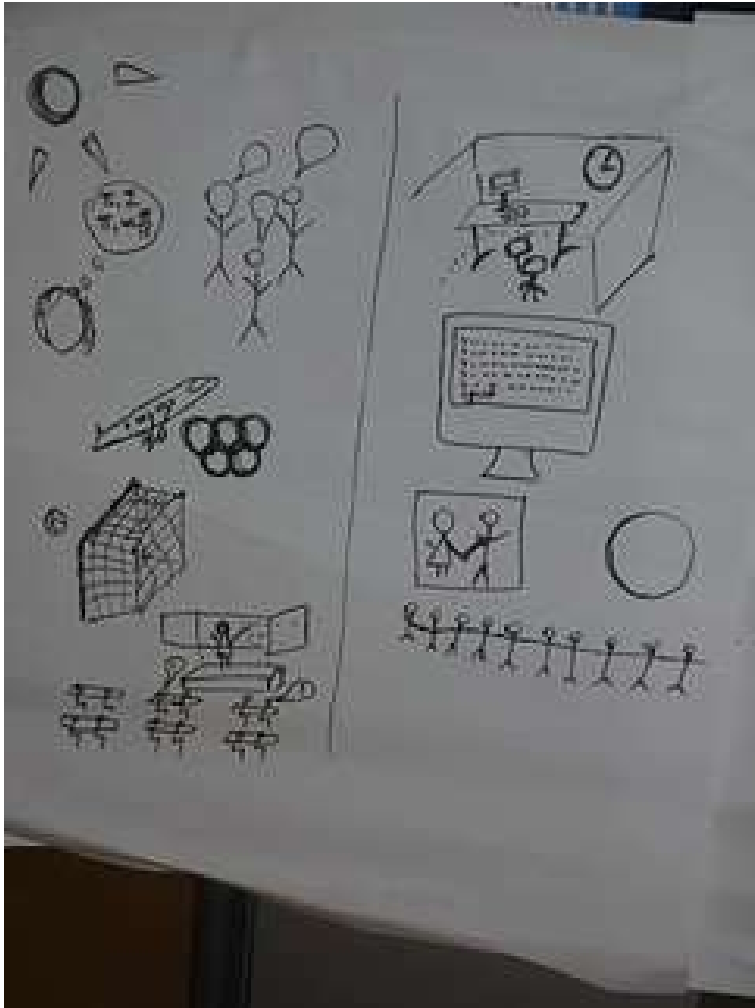


Ethics, Trust





# SESSION 1 : DREAMS AND NIGHTMARES



Learning outcomes: **Identifying personal values, aspirations, qualities, learning from others, gaining confidence, ethics.**

## Exercises:

## Dreams, life ideals

## Nightmare, threats of life

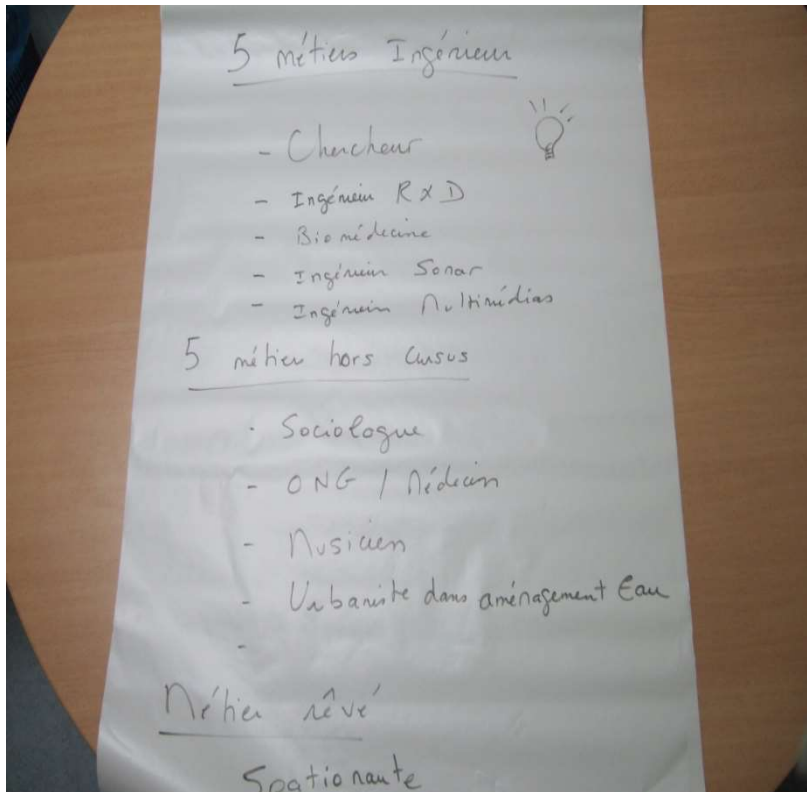
## ‘What I like’ / ‘What I dislike’

### Abilities for student:

**‘I know my values, my interests,  
I’m confident to explore the  
future’**

## SESSION 2 : CAREER CHOICE

### D1 Recognise and consider the VUCAity of a family of situations



Learning outcomes:

**Learning about professions,  
Projecting yourself as a  
young professional. Choice  
of professional scenarios.**

Exercises:

**5 engineering jobs**

**5 non-engineering jobs**

**1 'dream job'**



Ability for student:  
**'I know what draws  
me in'**

## SESSION 3 : THREE PRO TARGET SCENARIOS

### D3 Make a judgement in VUCA situations

Learning outcomes:

**Making First Professional Choices. Developing 3 scenarios to choose from. Targeting a favorite type of position.**

Exercises: (3 different scenarios)

**Identifying sectors + job + domain of technology + size of company + localization**

Ability for student:

**'I know what I plan to do as career'**



## SESSION 4 : INTERVIEWS WITH TARGETED PROFESSIONALS

### D3 Make a judgement in VUCA situations



Learning outcomes:

**Completing one's e-identity. In-depth interviews of professionals, the professional environment and the labor market.**

Exercise:

**Networking & enhancing employability.**

Ability for student:

**'I compare my scenarios to the reality of the market'**



## SESSION 5 : ANALYSIS, DESIGNING THE INDIVIDUAL STRATEGIC PROFESSIONAL DEVELOPMENT PLAN

D5 Organise and implement actions in VUCA situations

D6 Take responsibilities in the decision process in VUCA situations



Learning outcomes:  
**Interview analysis and measuring the gap between reality and initial scenarios.**

**Data analysis and action plan.**



Exercises:

**Analysis with feed-back & decision making.**

**Individual action plan (with SMART objectives).**

Ability for student:

**‘I decide !’**

## SESSION 6 : PROJECTION

**D5 Organise and implement actions in VUCA situations**

**During the career : D7 Learn from your experiences with VUCA situations**



Learning outcomes:

**Develop and maintain your first professional network. Define the principal target.**

**Networking to test the reality of the labour market.**

Exercises:

**Formalisation of the career project.  
Pitch**

Ability for student:

**'I give life to my project !'**



# STRENGTHS

## AND **DECISION-MAKING SKILLS**



- ▶ **Sustainable way** of thinking for future managers to make the right career choice in accordance with their personality and interests. [D6 Take responsibilities in the decision process in VUCA situations](#)
- ▶ **'The need for self-reflection and self-awareness'** are more and more required in professional practices: self-awareness, self-regulation, motivation, empathy, and social skills, at appropriate times and ways and in sufficient frequency to be effective in the situation' (Goleman, 1998).
- ▶ The method questions students about **their deep motivations**. At the end of the coaching, a **'ready to use' action plan is formalized**. [D2 Analyse VUCA situations](#)
- ▶ The method puts a context around managerial practices. The diversity and variety of personalities are a wealth of resources within the group. Some group members will assert themselves and enhance **leadership qualities**. [D5 Organise and implement actions in VUCA situations](#)
- ▶ **Group dynamic** multiplied and perpetuated: a student who has experienced the Co-orientation© process can **become a Mentor**, as early as the following year.
- ▶ A formative evaluation **improves students' judgment skills**. [D7 Learn from your experience in VUCA situations](#)
- ▶ Conducting interviews makes it possible for students to **create an interesting professional network and to assert their e-identity**. [D3 Make a judgement in VUCA situations](#)
- ▶ The method is applicable to **different audiences**.



## AREAS FOR IMPROVEMENT OF THE METHOD



- ▶ Syllabus scheduling is more easily applied to final-year students (M2, in our case). An experiment at IMT Atlantique was carried out with a mix of second- and third- year students (**M1 and M2**). In this case, the group dynamic did not lend itself to guaranteed success due to the greater general **difference in levels of maturity observed**.
- ▶ Student discovery of the « VUCA world » is done via interviews. It is important to develop students' awareness and agility towards the volatility, uncertainty, complexity and ambiguity of the international market.
- ▶ Students are confronted with different points of view and controversies, but perhaps not enough. (It depends on the number of interviews done.)
- ▶ **Intrinsic and extrinsic motivation: students volunteer for Co-orientation.** This commitment guarantees involvement. Studies show that these modalities of motivational dynamics have an impact on learning and on deciding.
- ▶ Supervising Co-orientation©: the core of the system: supervision plays a fundamental **centralizing** role in perpetuating the training system.

# DISCUSSION



- ✓ More efficient : Individual or collective coaching
- ✓ Co-development : Answer to the expectations of the new generation?
- ✓ Influence of the Coach : What are the limits?
- ✓ Method presented as a lifelong process of reflection, to discover their uniqueness, as well as a managerial attitude based on mutual help and respect.
- ✓ Benevolence, empathy, non-violent communication (NVC): a pedagogy that appeals to students?
- ✓ A method that develops cross-disciplinary skills, in particular for coordinating a team?
- ✓ A student who is not motivated by the method still manages to find a career project?
- ✓ Is motivation individual, collective or both?



# INSIGHTS



- It is important that universities include professional training sessions in their curriculum with standardized practices related to employability. **The method can be quickly integrated as a ready-to-go toolkit in university career training courses.**
- The Co-orientation© method focuses **on peer learning, incorporating both personal and professional development** that is reality-based.
- The method approaches career preparation by relying on coaching through **cognitive positive psychology** that promotes self-fulfillment and self-actualization; this is transferable to other projects.
- The intercultural dimensions of the participants encourage international careers and provide some examples of engineers who are '**citizens of the world**'.

# CONCLUSION

The co-orientation© method can facilitate decision-making with regard to professional mobility, throughout careers that will be subject to the vagaries of a volatile, uncertain, complex and ambiguous international market. The method can thus be quickly integrated as a ready-to-go toolkit in career training courses, to allow any university.

The skills acquired allow participants to evolve towards the status of managerial engineer or entrepreneur. **Co-orientation is a deep reflection and a good method for making career-related decisions throughout your life. Try it !**

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