CentraleSupélec | université PARIS-SACLAY

Convention du 26 avril 2022

International & Multiculturalism

26 / 04 / 2022

CentraleSupélec | université PARIS-SACLAY

Mot d'Introduction

Romain Soubeyran - Directeur général

Convention d'encadrement Avril 2022

Programme

- Café d'accueil 08h30 - 09h00
- Introduction Romain Soubeyran 09h00 – 09h25
- Plénière sur International et multiculturalisme 09h25 – 10h25
  - Marc Zolver et Divya Madhavan
- Plénière sur l'enquête « Accueil des étudiants internationaux » 10h25 - 10h45
  - Stanislas Gagey
- Pause café 10h45 – 11h00
- Grand Témoin, Henrik Pedersen Aalborg University et échange 11h00 – 12h30
- Déjeuner placement libre 12h30 – 14h00
- Présentation en plénière des ateliers 14h00 – 14h15
- Ateliers thématiques 14h15 – 15h45
- Restitution des Ateliers Thématiques 16h00 - 16h30

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International?

Did you hear us say… international?

Divya Madhavan & Marc Zolver

Convention d'encadrement 2022

Dwarfs on the shoulders of giants

signature de l'acte constitutif de l'association T.I.M.E
École Centrale Paris
De g. à d. : Elie Sigler, D. Depeyre, D. Gourisse, D. Peigné, D. Grimm

1ère assemblée générale commune
T.I.M.E. & CESAER
30 ans de T.I.M.E.

How it started, how it's going

1980…
THE PIONNERS - *BtoB approach*

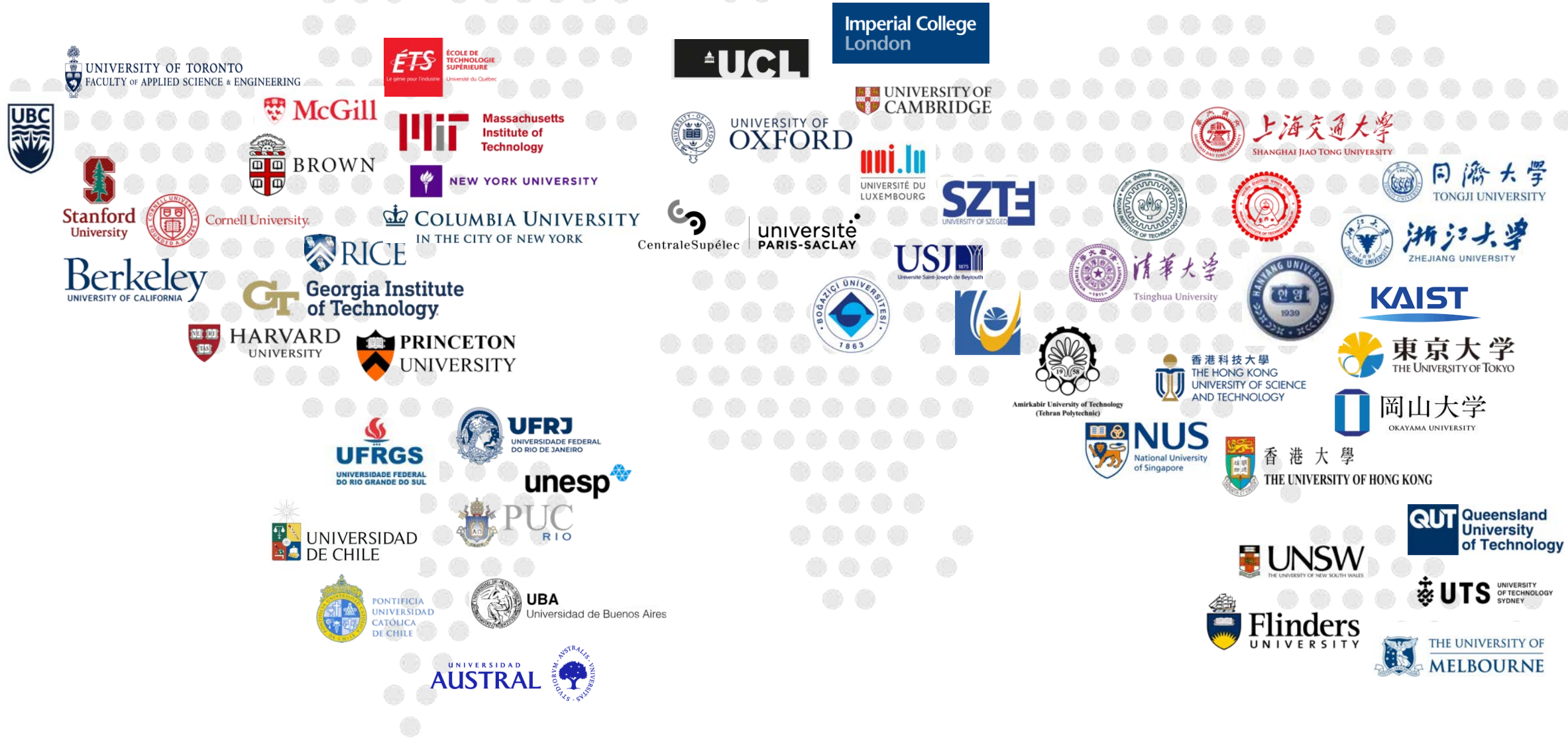
2003…
THE EXPANSIONISTS - *Mobility of people & programs*

Ariane reform & mandatory mobility

2013…
THE VISIONARIES - *A globalized world*

T.I.M.E.
CESAER
Vrije Universiteit Brussel
ULB
UMONS University of Mons
ULg Université de Liège
The University Of Queensland Australia
UNICAMP
USP Universidade de São Paulo
ITBA
Polytechnique Montréal Université d'ingénierie
ENSTA IP Paris
Beihang University
Xian Jiaotong University
LUT University
ISAE Supaero
TUM Technische Universität München
Danmarks Tekniske Universitet DTU
École CentraleLyon
centralelille
Centrale Marseille
Mines Saint-Étienne
Centrale Nantes
École des Ponts ParisTech
Università degli Studi di Trento
Aristotle University of Thessaloniki
National Technical University of Athens
YNU
Università degli Studi di Padova
Keio University
Tohoku University
AGH
Wrocław University of Science and Technology
Escuela Técnica Superior de Ingeniería de Sevilla
Universidad Pontificia ICAI ICADE Comillas
POLYTECH Peter the Great St.Petersburg Polytechnic University
Lunds Universitet Lunds Tekniska Högskola
UCL Université catholique de Louvain
KTH Vetenskap och Konst
ČVUT České vysoké učení technické v Praze
TU Wien Technische Universität Wien Vienna | Austria
1862 Riga Technical University
NTNU
RWTH Aachen University
Leibniz Universität Hannover
Technische Universität Dresden
Technische Universität Darmstadt
CentraleSupélec
université PARIS-SACLAY
Technische Universität Berlin
Politecnico di Torino
Politecnico Milano 1863
Műegyetem 1782
Universitat Politècnica de València
UPC Universitat Politècnica de Catalunya
Universidad Politécnica de Madrid
İTÜ
Instituto Superior Técnico
Aalborg Universitet
Chalmers University of Technology
Aalto University
Tomsk Polytechnic University
TU Delft Delft University of Technology
ETH zürich
EPFL École Polytechnique Fédérale de Lausanne
University of Twente.
Ghent University
Sapienza Università di Roma
KU Leuven
BRNO University of Technology
Technische Universität Braunschweig
Tallinn University of Technology
KIT Karlsruher Institut für Technologie
ktu kaunas university of technology 1922
TU Graz Graz University of Technology
TECHNION Israel Institute of Technology
University of Stuttgart Germany
ParisTech Institut des Sciences et Technologie Paris Institute of Technology
Slovak University of Technology in Bratislava
INSA Institut National des Sciences Appliquées Lyon
University of Strathclyde Glasgow
Institut Polytechnique de Paris
The University Of Sheffield.
Communauté Université Grenoble Alpes
U.PORTO
University of Belgrade
University of Southampton
University of Surrey
Warsaw University of Technology
Politechnika Poznańska
Gdańsk University of Technology

& SOME OTHERS


UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING
ÉTS
ÉCOLE DE TECHNOLOGIE SUPÉRIEURE
UCL
Imperial College London
UBC
McGill
Massachusetts Institute of Technology
UNIVERSITY OF CAMBRIDGE
UNIVERSITY OF OXFORD
BROWN
NEW YORK UNIVERSITY
uni.lu
UNIVERSITÉ DU LUXEMBOURG
SZTE
UNIVERSITY OF SZEGED
上海交通大學
SHANGHAI JIAO TONG UNIVERSITY
同濟大學
TONGJI UNIVERSITY
Stanford University
Cornell University
COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
CentraleSupélec
université PARIS-SACLAY
浙江大學
ZHEJIANG UNIVERSITY
RICE
USJ
Université Saint-Joseph de Beyrouth
Berkeley
UNIVERSITY OF CALIFORNIA
Georgia Institute of Technology
清華大學
Tsinghua University
KAIST
HARVARD UNIVERSITY
PRINCETON UNIVERSITY
東京大学
THE UNIVERSITY OF TOKYO
香港科技大學
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
Amirkabir University of Technology (Tehran Polytechnic)
岡山大学
OKAYAMA UNIVERSITY
UFRJ
UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
UFRGS
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL
NUS
National University of Singapore
香港大學
THE UNIVERSITY OF HONG KONG
unesp
PUC RIO
UNIVERSIDAD DE CHILE
Queensland University of Technology
UNSW
THE UNIVERSITY OF NEW SOUTH WALES
PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
UBA
Universidad de Buenos Aires
UTS
UNIVERSITY OF TECHNOLOGY SYDNEY
Flinders UNIVERSITY
UNIVERSIDAD AUSTRAL
THE UNIVERSITY OF MELBOURNE

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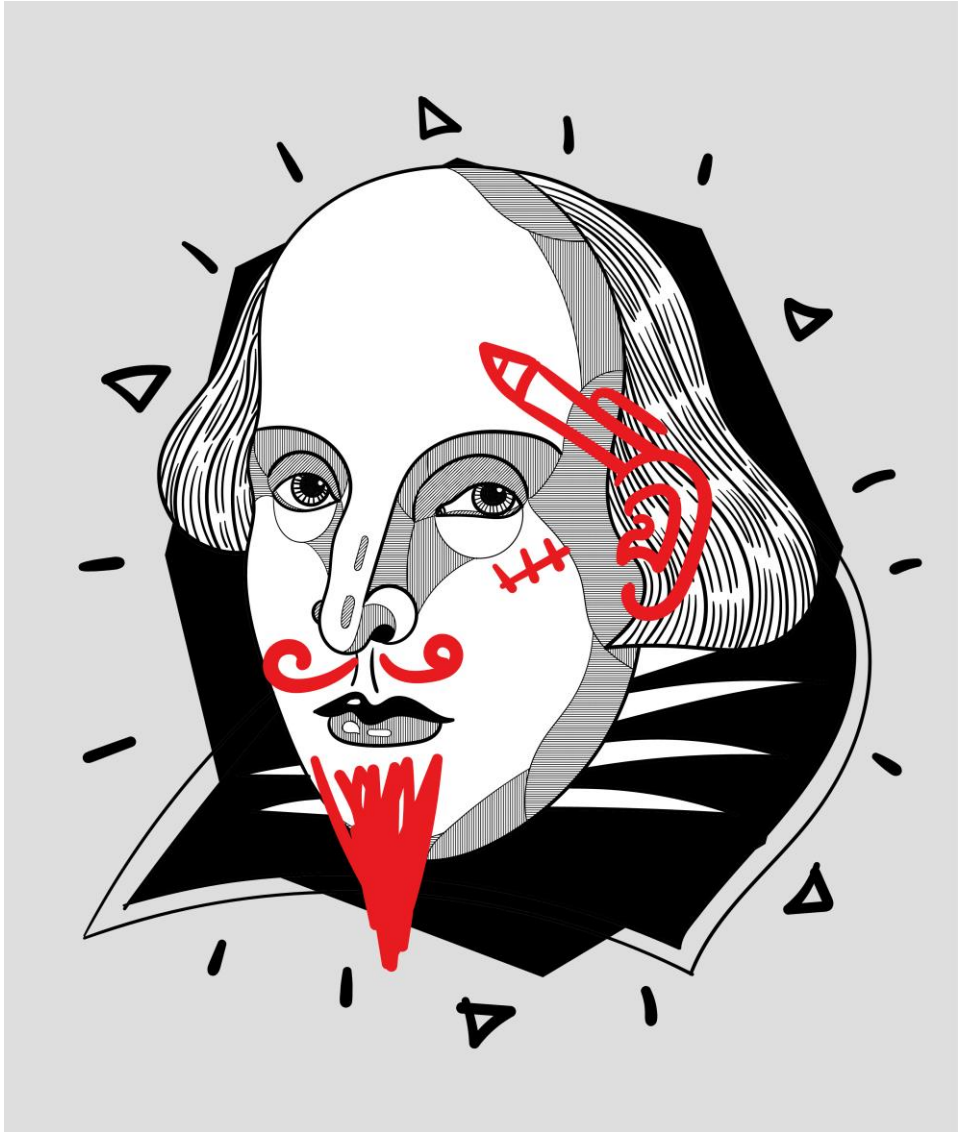
Which brings us to

The English language



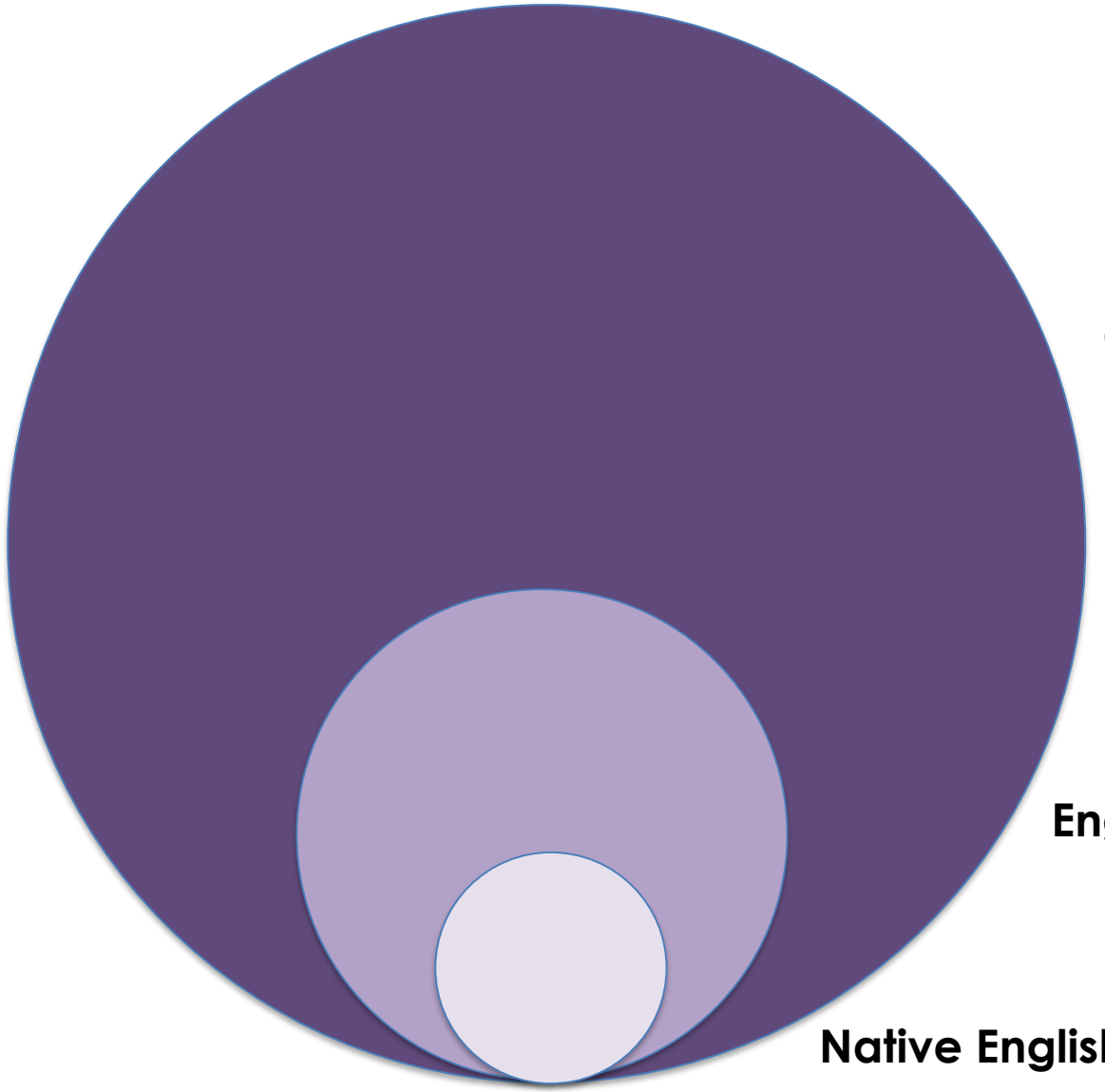
My tailor is rich

Brian is in the kitchen

Mon premier mot de français :

Et je n'ai JAMAIS entendu un vrai Français le dire

English as a Lingua Franca



7,8 billion people

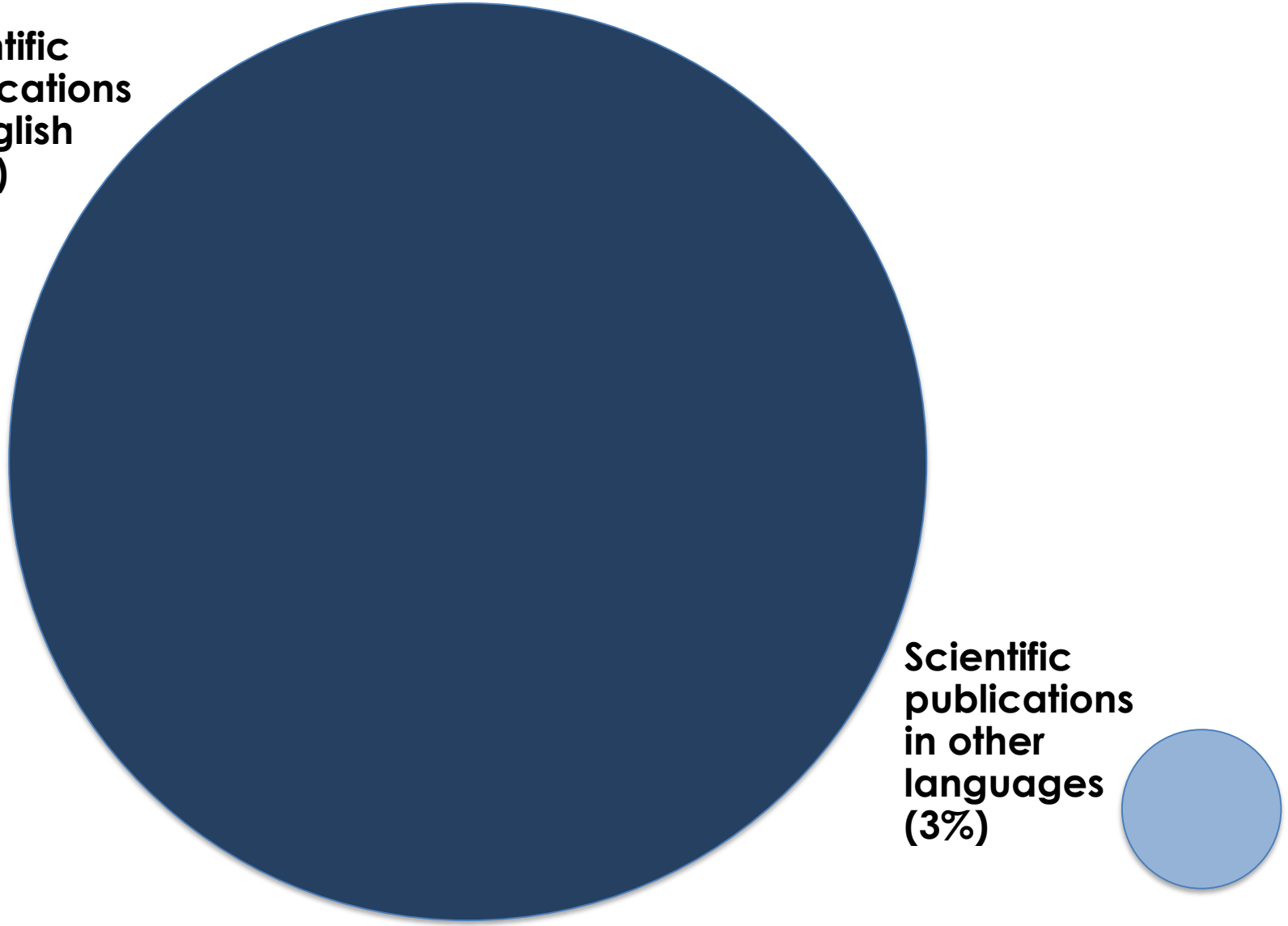
1,35 billion

English speakers

360 million

Native English speakers

English as a Lingua Franca



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English as a Lingua Franca

When we use English as a common working language:

What's important?

- Speaking clearly
- Using simple, efficient language structures that prioritise the message
- Respecting the variety of cultures and speakers who use English
- Avoiding excessively idiomatic/culture-specific expressions that will make it harder for your listener

What is not important?

- Your accent
- What other people think of your accent
- Whether you remember all your irregular verbs perfectly
- Sounding like you just stepped out of Buckingham Palace

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A word from our partners

Video Set 1

International @ your institution

UNIVERSITY OF CAMBRIDGE

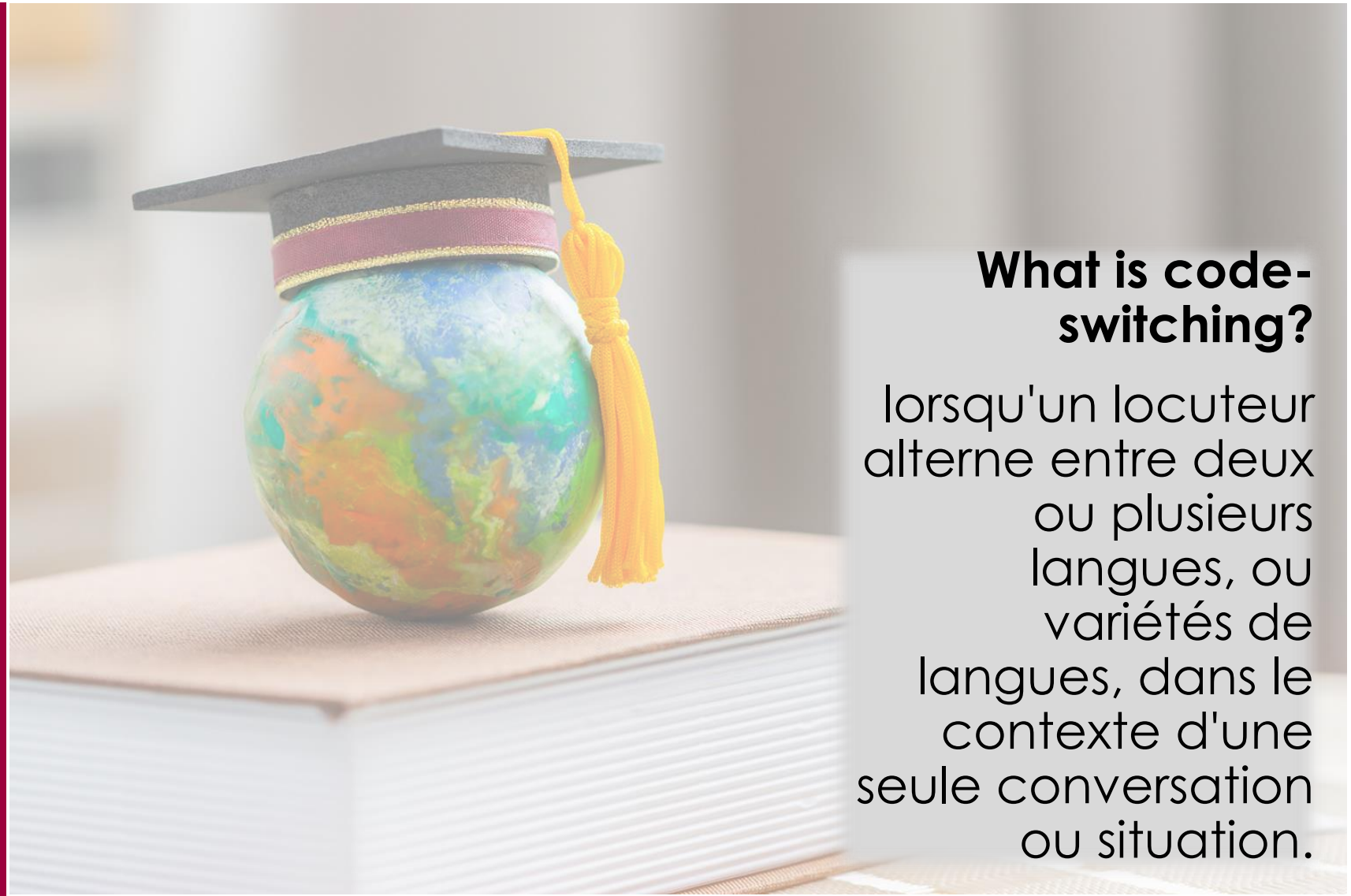
Flinders UNIVERSITY

International: Why?

Heureux qui comme Ulysse a fait un beau voyage...

- **For students**
  - Maturity & competencies
  - Mutual enrichment of our Students and Staffs
  - Train the best
- **For CentraleSupélec and its staff**
  - Peer amongst the peers
  - Research and Education
  - Revenue and resources
- **For Companies**
  - Global challenges and markets
  - Alumni for national & international companies
  - Top-positions in international companies
- **For Society & a better World**
  - Widening our eyes and get to know each others
  - SGs awareness and impacts
  - Scientific and Technological diplomacy
  - Sharing practices and values

Code-switching: the key to an international educational environment



What is code-switching?

lorsqu'un locuteur alterne entre deux ou plusieurs langues, ou variétés de langues, dans le contexte d'une seule conversation ou situation.

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A word from our partners

Video Set 2

International @ your institution

Keio University

1858

CALAMVS GLADIO FORTIOR

ULB UNIVERSITÉ LIBRE DE BRUXELLES

POLITECNICO MILANO 1863

International: How?

A complex system where the whole is greater than the sum of its parts

How to avoid misunderstandings

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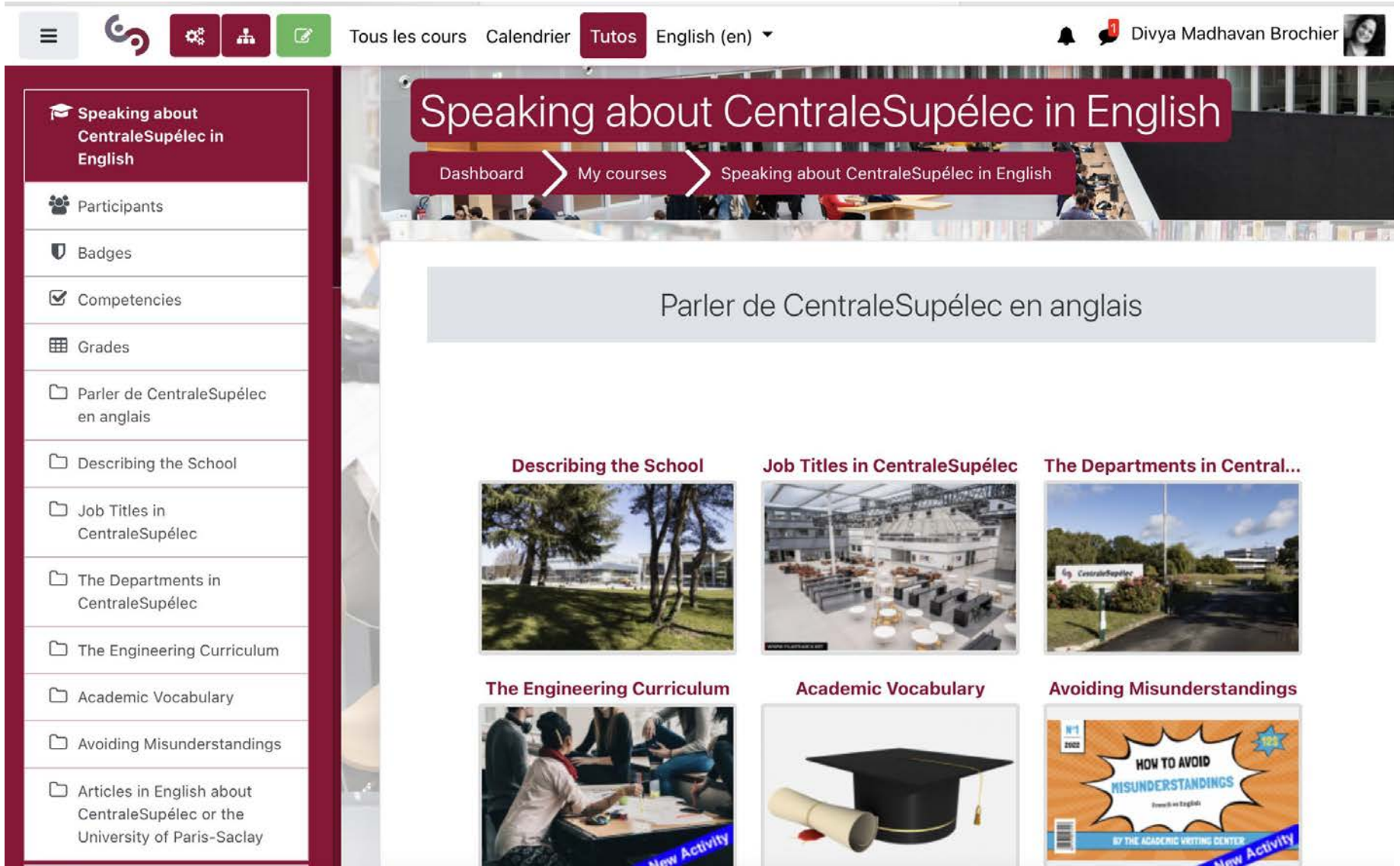
RDV sur Edunao



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A word from our partners

Video Set 3

International @ your institution

UNIVERSIDADE DE SÃO PAULO

University of Nairobi

Massachusetts Institute of Technology

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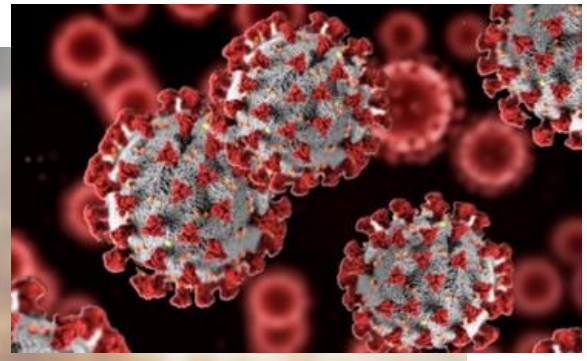
A greater understanding of societal and environmental challenges



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A greater understanding of humanity, in all its diversity and creativity

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Let's keep the international momentum going

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Welcoming International Students

DMC - DRI

26 / 04 / 2022

Contexte

The purpose of this survey is to assess the reception and support of international students at CentraleSupélec, and to identify areas for improvement to better meet their needs and expectations.

A focus group preceded the questionnaire, with students from different nationalities and backgrounds. This allowed us to collect qualitative informations.

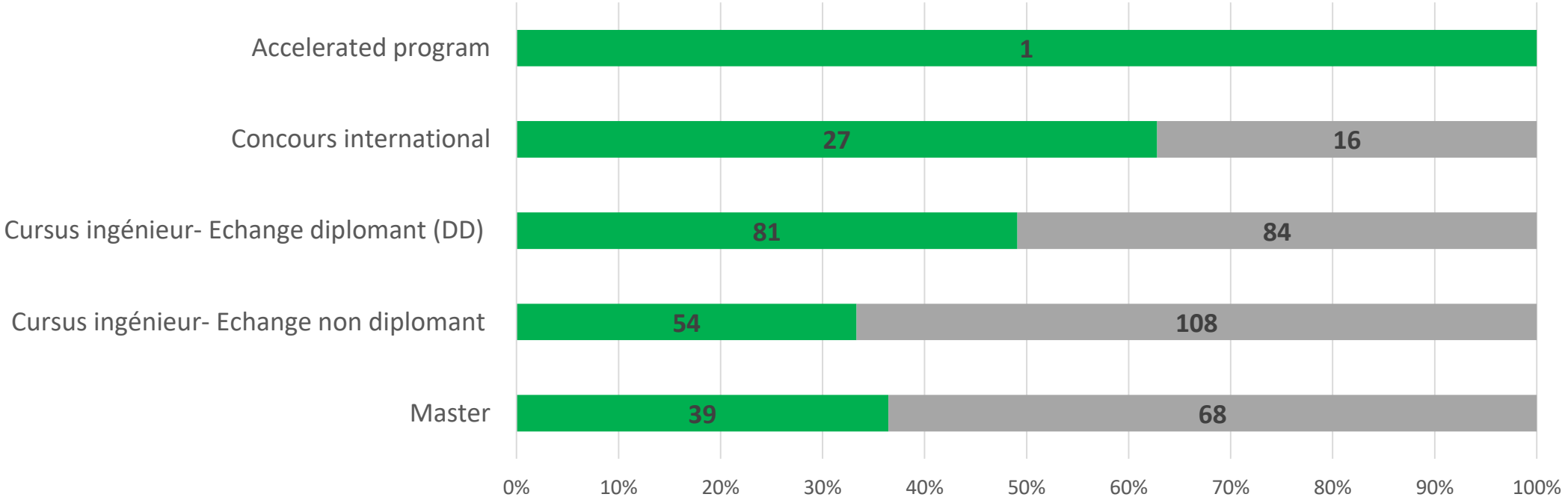
The questionnaire was sent to 478 students from different courses, excluding doctoral students.

Response rate :

48 % (230 questionnaires out of 478)
33 % (159 out of 478 complete questionnaires)

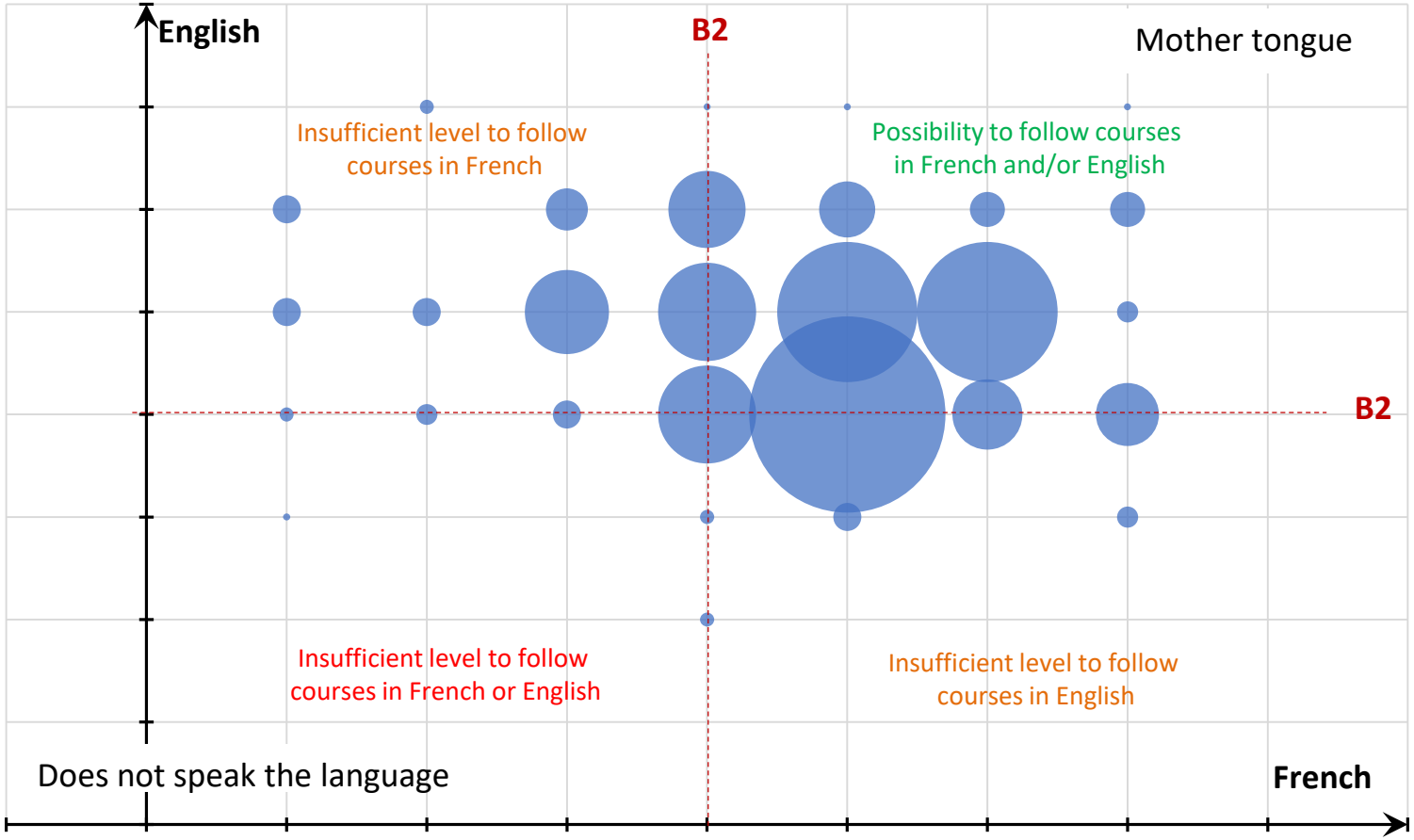
Respondent's profiles

Distribution by program



Respondent's profiles

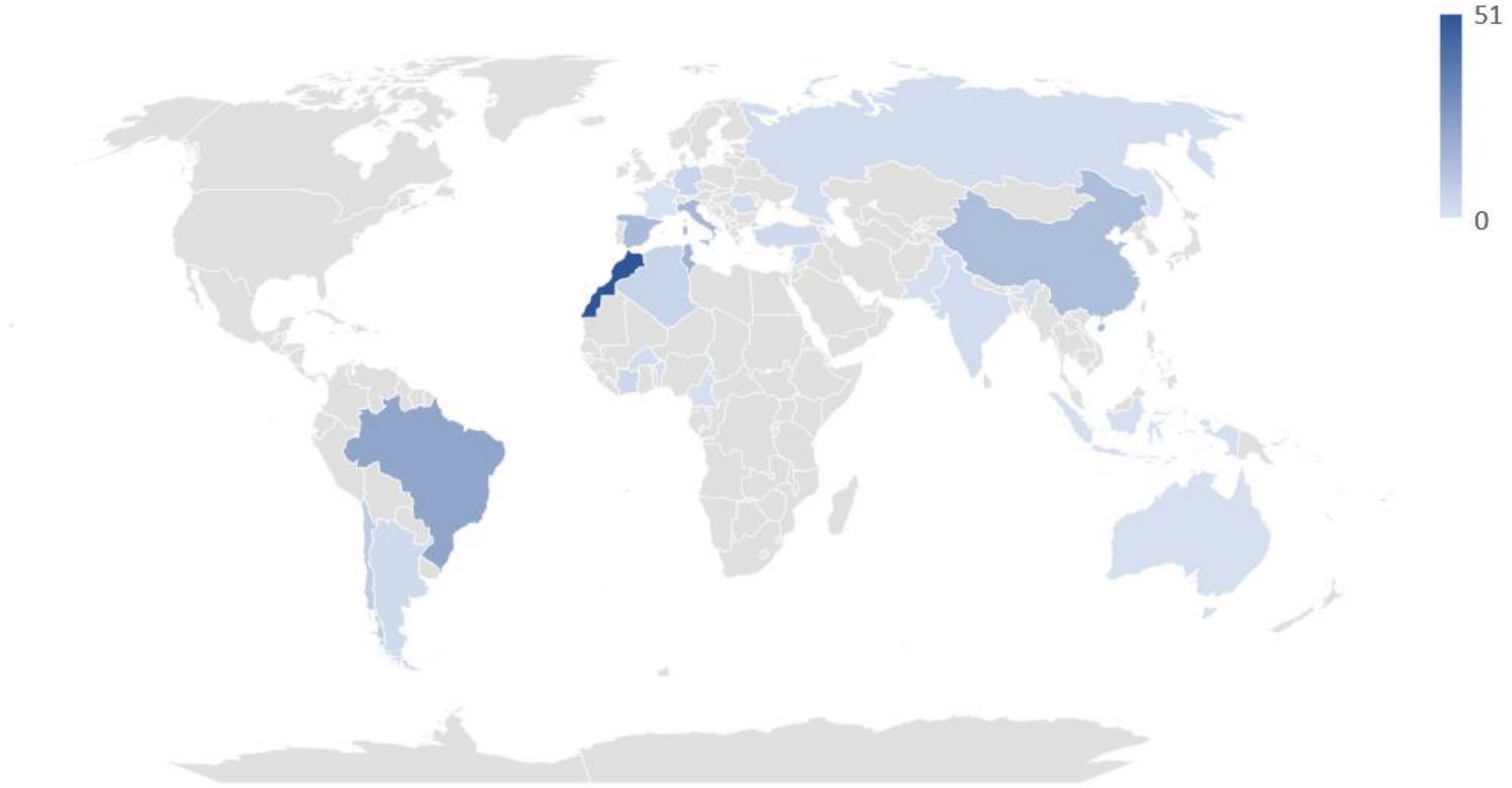
Language level in French and English



* La taille des bulles représente le nombre d'élèves pour un double-niveau Fr/En donné

Respondent's profiles

Distribution by nationality

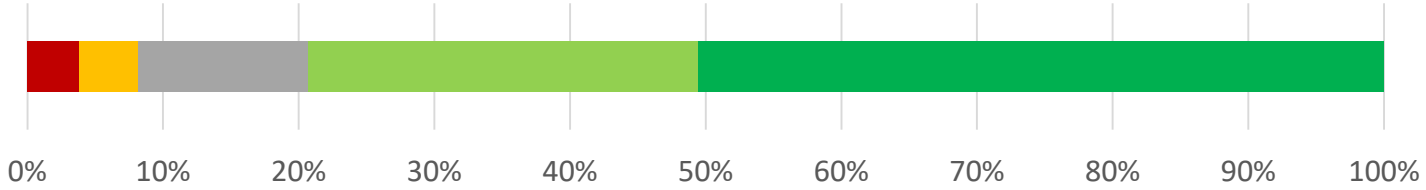


Main questions

Importance and Accessibility

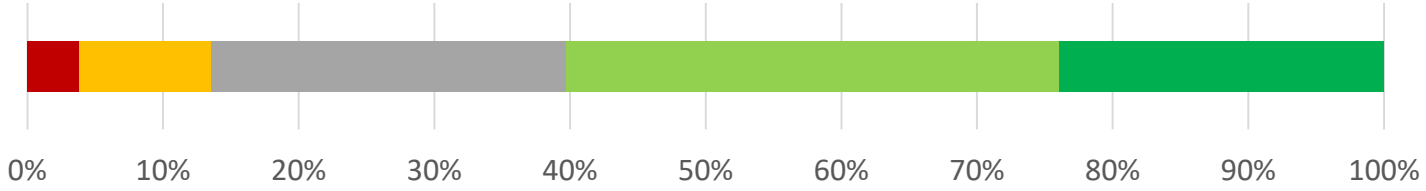
of school services for international students

On a scale of 1 to 5, how do you rate the **importance** of supporting international students at CentraleSupelec?



Average: **4,2**

On a scale of 1 to 5, how do you rate the **accessibility** of the school's services for international students?



Average: **3,7**

* score 1 expresses a very low level of satisfaction, score 5 reflects a high level of satisfaction

Ce qui manque dans l'accueil des EI à CS :

Je pense qu'il faut considérer les personnes venant de prépas à l'étranger comme des internationaux notamment pour les soirées d'intégration BDI pour les aider à connaitre de nouvelles personnes et ne pas rester isolé.

Les cours de CS reposants sur les bases acquises pour la plupart dans les classes prépa, les internationaux ont beaucoup de mal à avoir de bonnes notes…

Plus D'intégration avec les Français, non seulement BDI

Instructions and Briefing in English
Professionalism classes in English

… j'ai trouvé beaucoup de difficultés à ce niveau « ouverture compte bancaire » vu que je n'ai pas encore eu ma carte bancaire et je ne peux pas bénéficier de la majorité des services de l'école (laverie, Restauration...).

It is not clear how the courses works
There should be clearer explanations about them, and there should be a bigger offer of classes in English

We were not given enough information with the curriculum structure before exchange.
Large restrictions on course selection and lack of information
In sufficient amount of information given in english

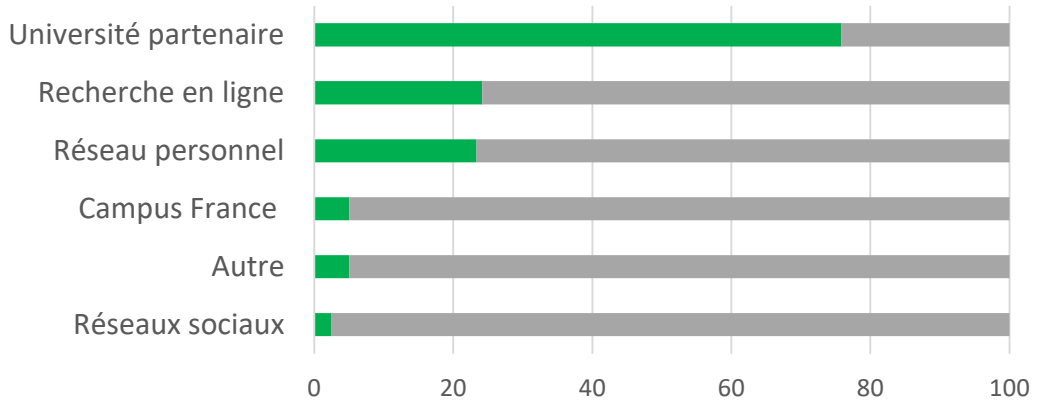
Better information before arrival, help to chose suitable courses, info about how things work at school, communicate that international students are allowed to write exams in english in most courses etc.

Application

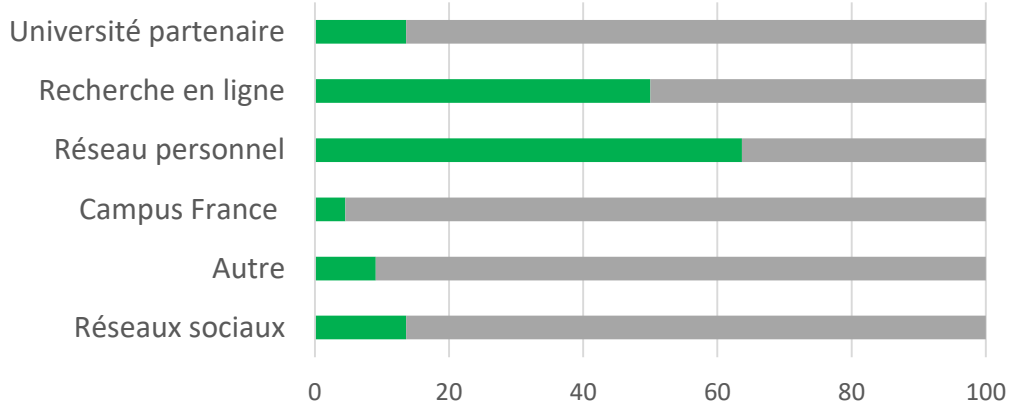
Application 1/2

Where did you find the information about CentraleSupélec and your program?

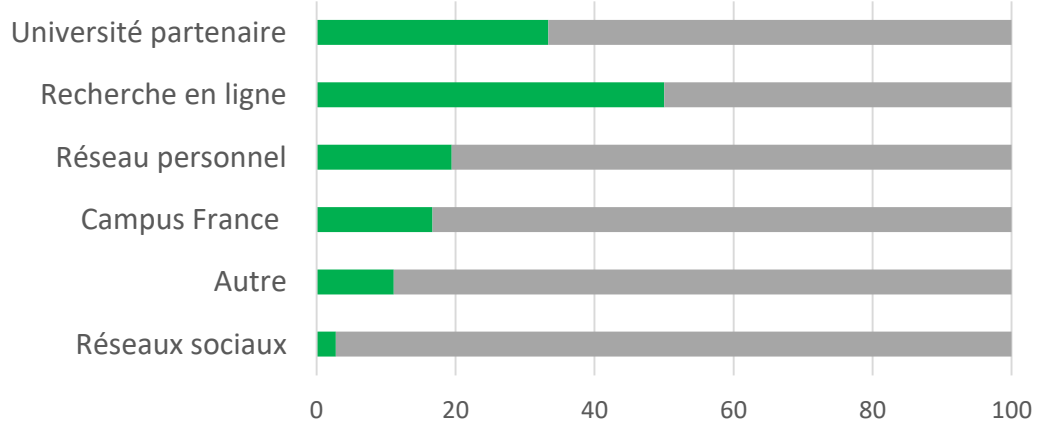
Exchange students



International entrance exam



Master



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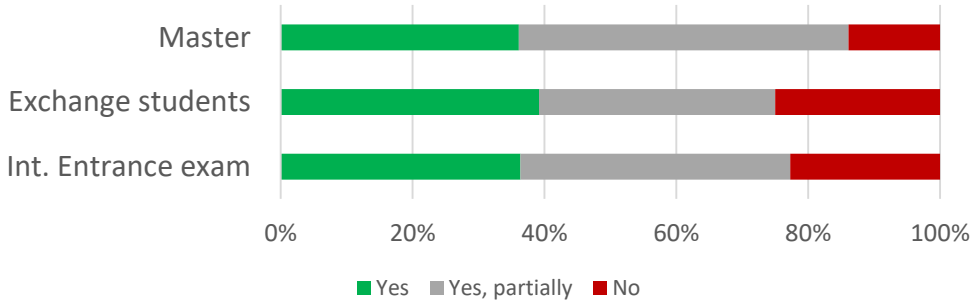
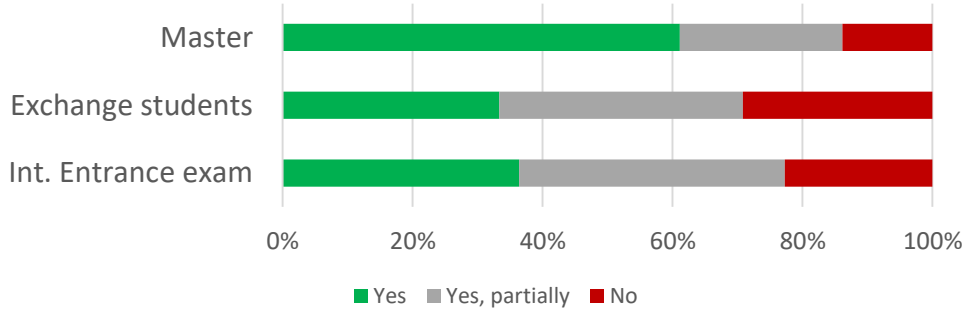
Application 2/2

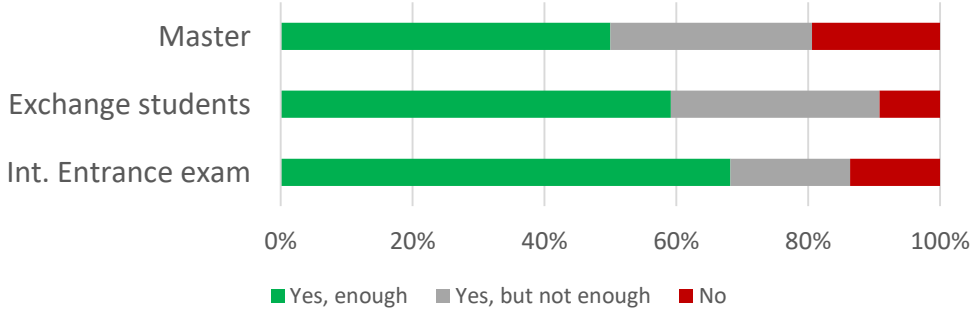
Was the information about the program clear and sufficient?



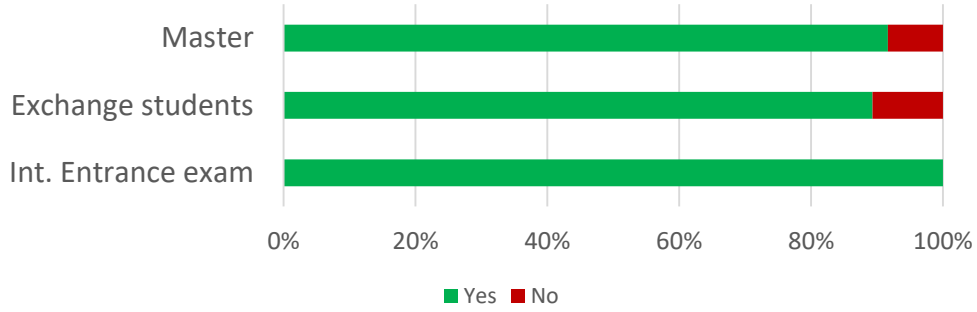
Was the information about the campus clear and sufficient?



Did you receive the necessary help in your application process?



Are the deadlines appropriate?



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Suggestions

Don't hide the fact that one can be sent to another campus if ones grades are not sufficient

Better information regarding courses and the different periods of the semster/school year as this is a very different systems from most other international universities

There is not enough information about CS online. The course catalog is difficult to find and impossible to understand how it is structured until you arrive in France. The website doesn't have many practical informations for international students. We also are not informed properly about the three different campi and how we may be forced to leave.

Le résultat de l'admission a été donné en janvier / février, tandis que les autres universités partenaires l'avaient donné en Decembre

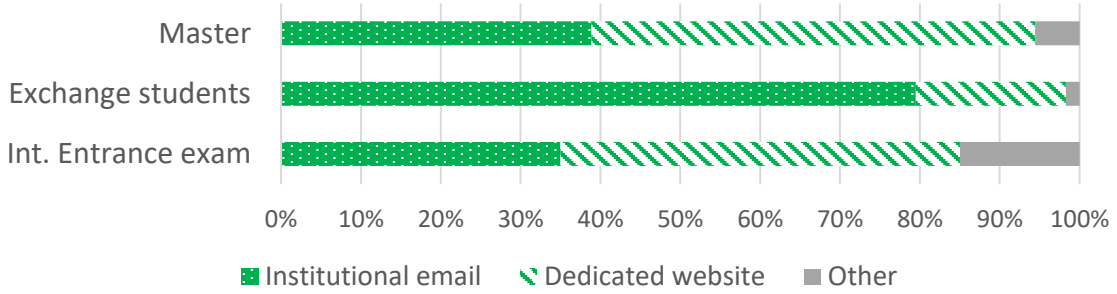
… CentraleSupelec ne permet pas un accompagnemet claire pour une personne qui n'a jamais quitté son pays natale (procédure CampusFrance,Visa,Test Covid, préparation de bagages aléatoires vu que la situation de sejour est ambigu,recherche de logement jusqu'à arrivée,CAF,Assurance maladie, validation de visa.....).
…. avoir un lien où on trouve toutes les étapes par lesquelles passe un étudiant étranger pour se stabiliser en France,où pour chaque étape il y a les ressources nécessaires et un FAQ.

I think, acception letters could be sent earlier because of the visa processes. More time is a good change to make correct misunderstandings and mistakes.

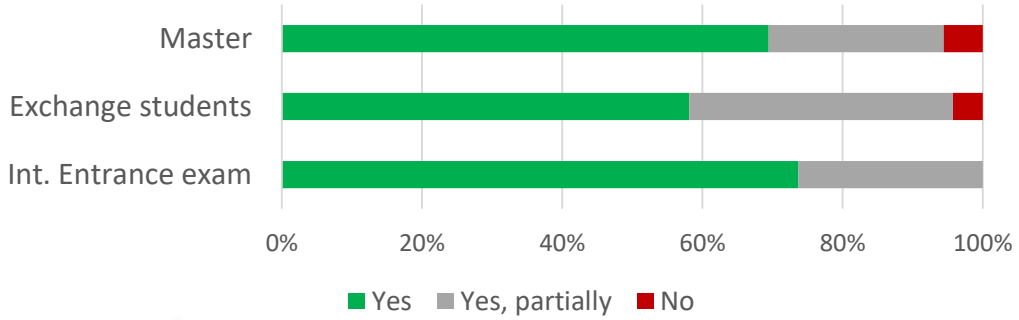
Admission

Registration process

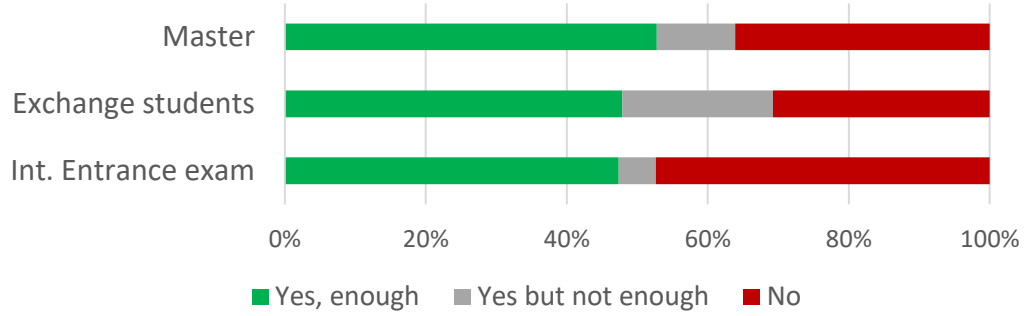
Where were you able to access the information about registration?



Was the information you received clear and sufficient?



Were you helped by the institution to prepare your arrival in France (visa, registration ...)?



Suggestions

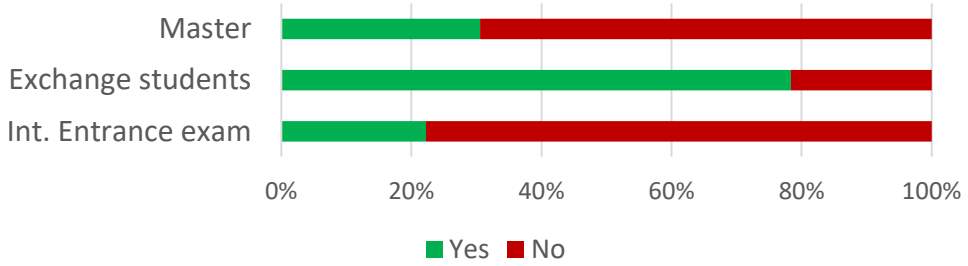
a step by step pdf

Les internationaux ont besoin d'une attestation de logement pour demander un visa pour venir en France. Ce serait bien si Césal serait plus joignable et surtout demanderait des documents faisables avant l'arrivée en France pour les étrangers (par exemple, elle pourrait donner un avis favorable pour le loyer avant de recevoir l'assurance habitation puisque c'est difficile de la payer sans compte bancaire français qui nécessite lui-même un logement en France)

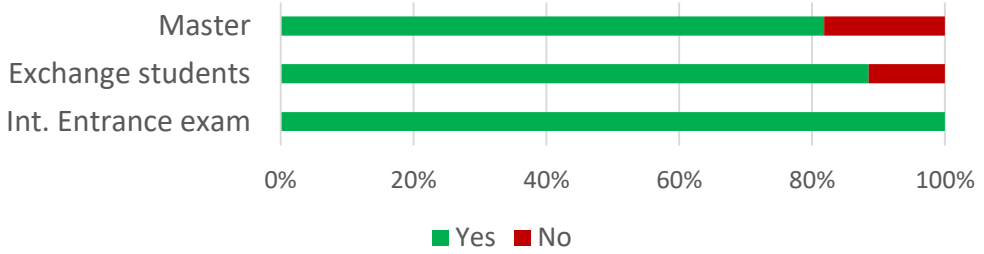
Arrival in France

Arrival in France

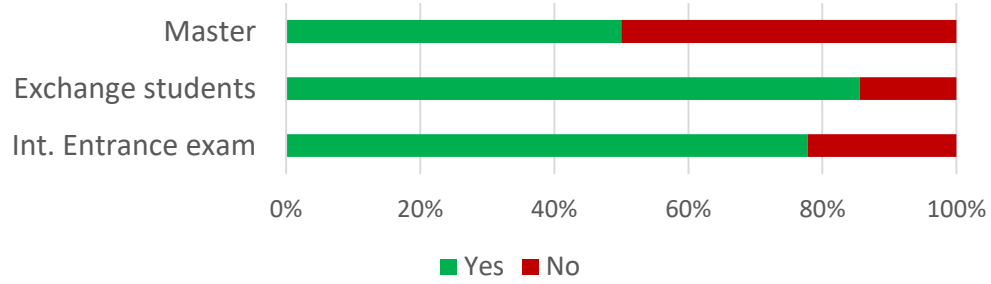
Were you welcomed by school staff, students from the international students association (BDI) or another association?



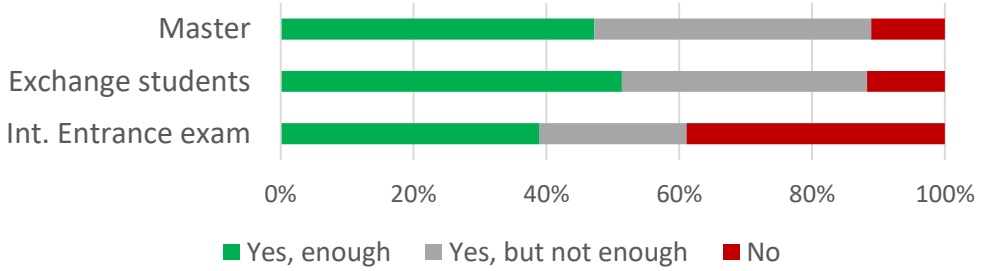
Do you find this welcome useful and sufficient?



Did you find accommodation easily?



Is the help offered by the school for your administrative procedures (registration, residence permit...) sufficient?



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Principales difficultés rencontrées

Ouverture de compte bancaire
Procedures pour avoir une couverture médicale

One gets the feeling that french people don't want you to be here at all…

A lot of difficulties with cesal

Césal didn't give me my room (already reserved and caution paid) because there weren't enough créneaux d'état de lieux.

Les démarches associées à la bureaucratie gouvernementale, qui est assez lente et compliquée. e.g. : CAF, Sécurité Sociale, ouverture de compte bancaire.

La langue et le cursus (surtout les maths car elles sont beaucoup plus théoriques et on l'a jamais fait à ce niveaux). En plus de la pression d'avoir des bonnes notes pour pouvoir continuer mon séjour dans ma destination choisi, avec tous les difficultés déjà rencontrés.

Obtention du Visa

L'arrivée à l'aéroport.
se rendre sur le campus

Titre de séjour !
Après dans l'école les étudiants ne sont pas très bienveillants

The difficulties associated with moving to a new country and living alone: finding furniture, opening a bank account, going to the market, speaking a new language.

Des grandes difficultés d'intégration dans la vie associative

The campus is basically middle of nowhere, no information on how to arrive to campus was given and campus map is not easy to find beforehand

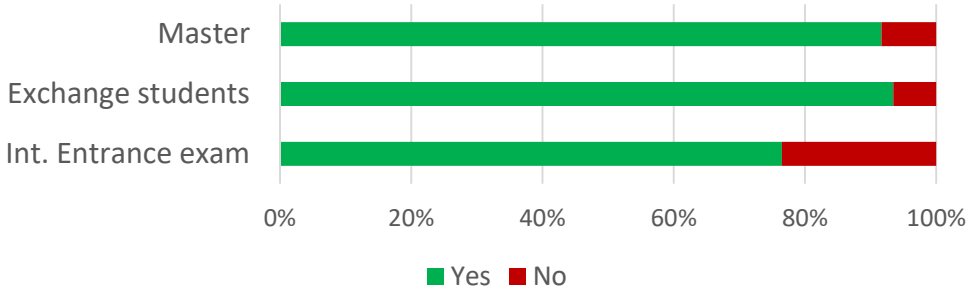
Trouver un logement proche de l'école

Curriculum

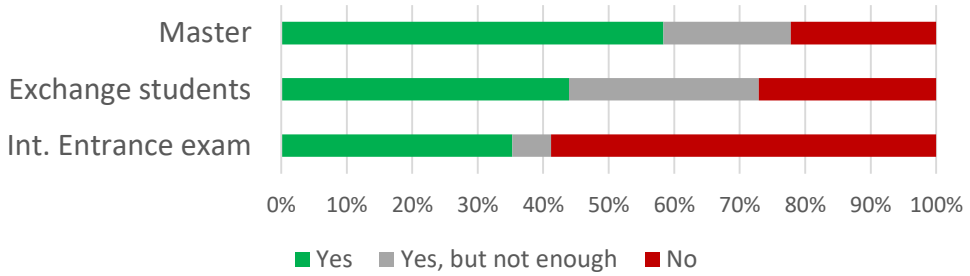
Curriculum 1/2

Induction sessions, information meeting

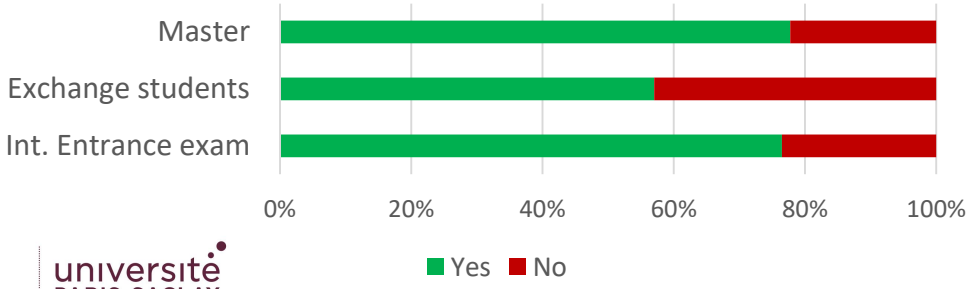
Do you think that a specific welcome for international students is useful/necessary?



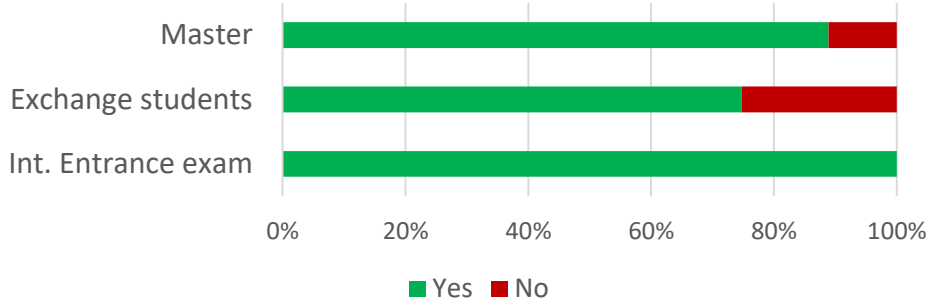
Did you receive a specific welcome (induction sessions, information meeting, etc.)?



During these induction sessions, was the information about the curriculum clear and sufficient?



Was the language of the induction meetings suited to your needs?



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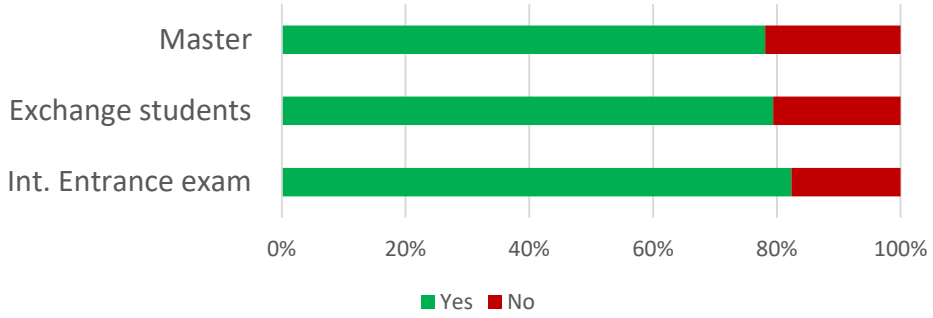
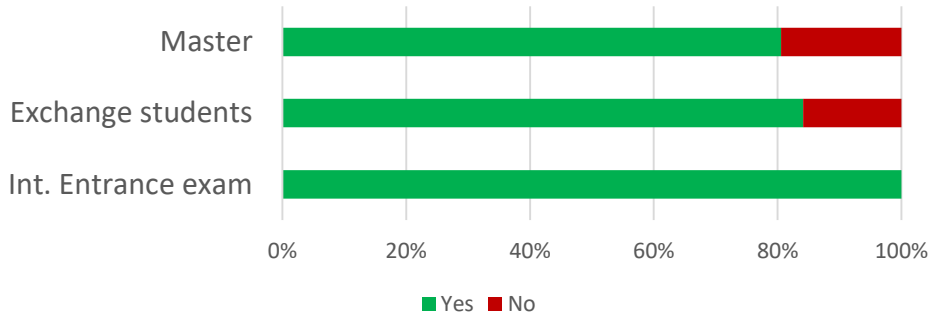
Curriculum 2/2

Courses and activities related to the curriculum

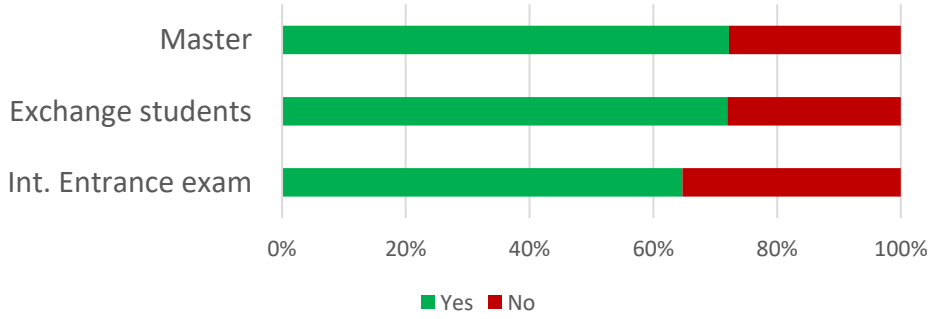
As far as possible, has your choice of courses been respected?



Was the course language appropriate for your needs?



In case of difficulties, do you know who to turn to?



Commentaires / Suggestions

Faire les amphis de rentrée en anglais

J'ai deja choisi de cours en anglais dont le td ou le poly etait quand meme en français

Classes are in French some eve though I registered English one

Add more classes in English!
And give the possibility to change later on the courses bc it's not really clear at the moment of the choice

Arrange mentorship programe to international students, by assigning a mentor of higher year to an international students for fist few weeks

Either you offer everything in English or communicate clearly that you need at least C1 French level. anything else makes no sense.

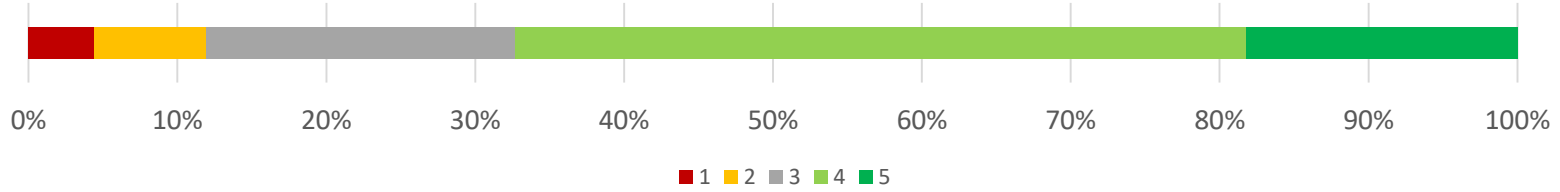
About the reinforcements:
International students come from very different backgrounds, so they need different reinforcements about different topics. An option could be having more smaller groups.

The students often have to discover how the course works on their own or by talking to the veterans. The school doesn't do much.

Global feedback

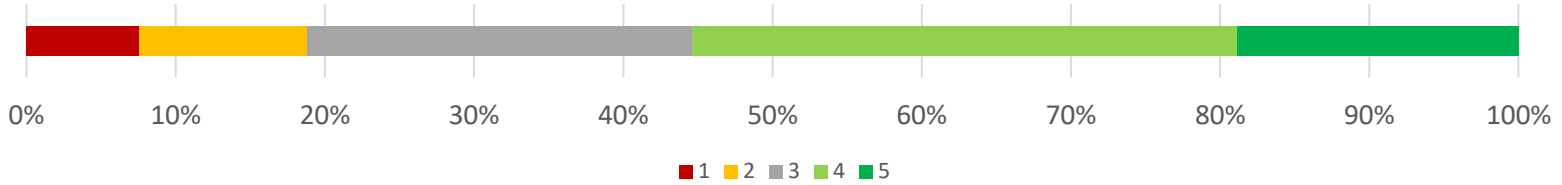
Global satisfaction 1/2

On a scale of 1 to 5, how would you rate the welcoming of international students at CentraleSupélec?



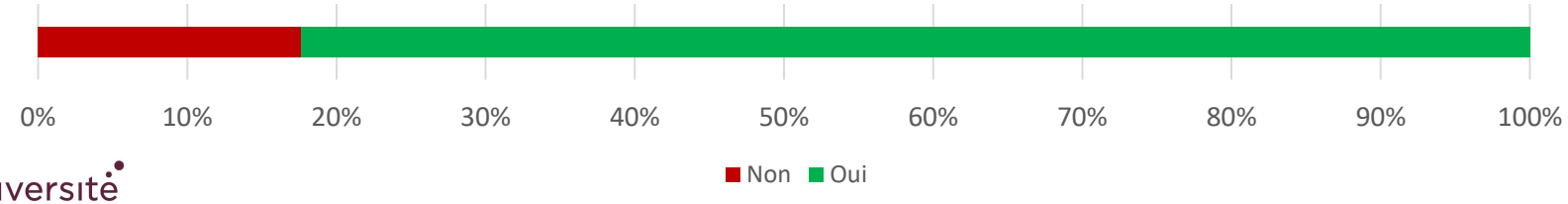
Average: **3,7**

On a scale of 1 to 5, how would you rate the support of international students at CentraleSupélec?



Average: **3,5**

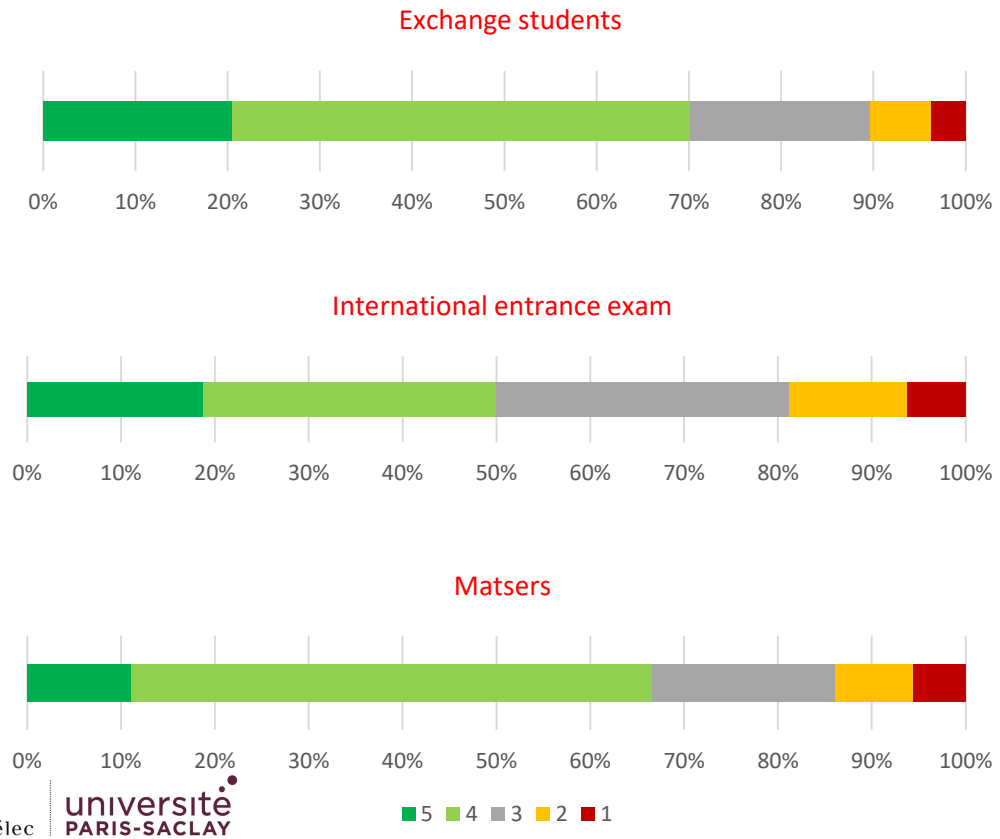
Would you recommend CentraleSupélec in your home country or institution?



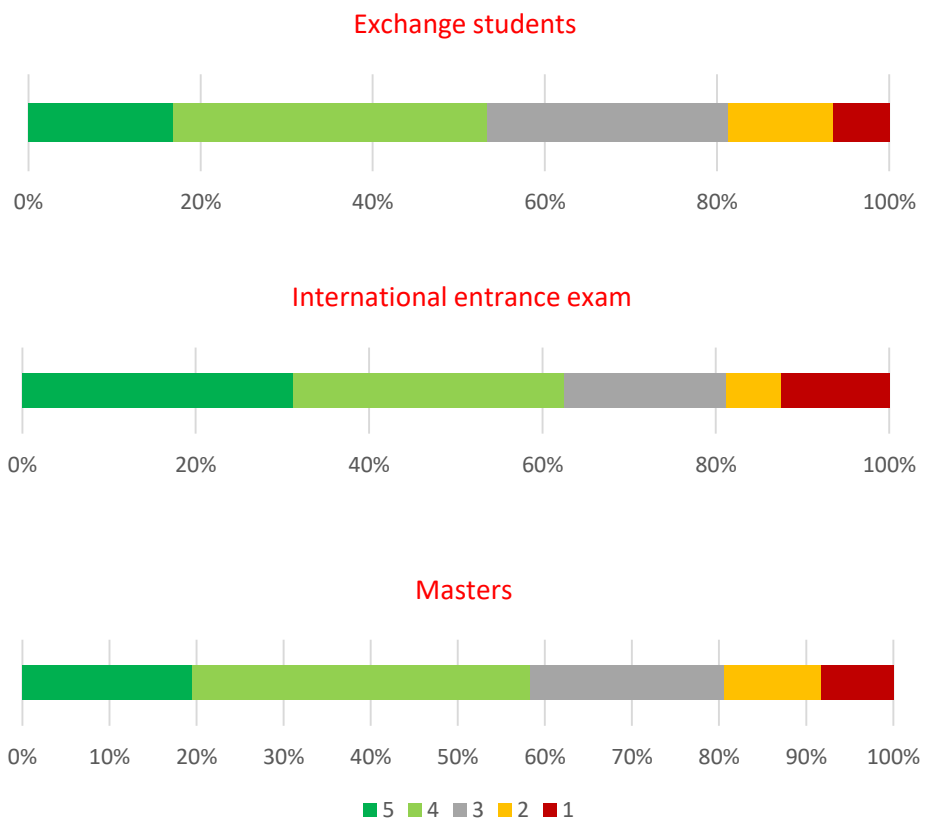
Global satisfaction 2/2

According to the program

On a scale of 1 to 5, how would you rate the welcoming of international students at CentraleSupélec?



On a scale of 1 to 5, how would you rate the support of international students at CentraleSupélec?



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Pour quelles raisons 15% des EI ne recommandent pas CS?

Bc there are not enough courses in English

Je trouve ça moyen de remplir les campus moins désirés avec les élèves internationaux, à qui on ne laisse pas le choix

I was bullied and put aside for not knowing your language, not just by students but also and especially by teachers.

C un cours pas du tout adapté pour les ingénieurs, bcp plus de math que le nécessaire et 5 fois plus de cours au 1er année qu'au 2eme, il fait rien de sens

I would only recommend CS for a 2A+3A program. The first year curriculum is just more difficult than it has to be and includes many math subjects that are too theoretical and frankly unnecessary for the average engineer. International students who haven't been through prépa aren't prepared for that and the professors don't seem to care.

We cancelled already the partnership. After my stay my mental health is worse than before. In group work for example the french almost ignored me because they didn't want to communicate with me in english. Why should I go to France when I have the feeling they hate me?

Conclusions

- Lack of information about the school and the organization of the curriculum before arriving at CentraleSupélec
- Heavy administrative procedures to be completed before and upon arrival in France: CAF, residence permit, opening a bank account...
- Not enough courses in English or the language of instruction is not respected for courses that are supposed to be taught in English

Engineering program :

- Lack of a specific welcome for international students from the international track (concours international)
- The complexity of the curriculum requires better support at the beginning of the year: the opening lectures and support materials (slides) are in French, which does not help in understanding the organization of the curriculum
- The campus assignment system is unfavorable for international students

Masters :

- Difficulties in finding housing

Welcoming of international Ph.D. students

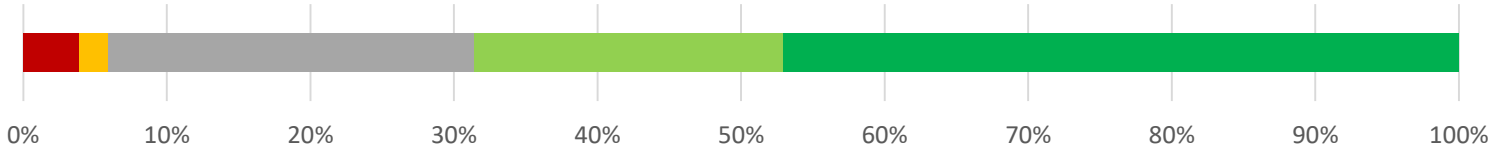
Survey in progress

- Survey conducted for 220 Ph.D. students
- Return rate on 25/04/2022 : 19,5 % (43 questionnaires out of 220)

Importance and Accessibility

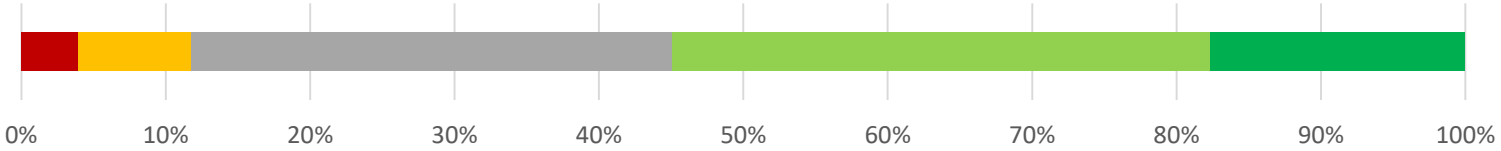
of school services for international Ph.D.students

On a scale of 1 to 5, how do you rate the importance of supporting international Ph.D. students at CentraleSupelec?...



Average: **4,1**

On a scale of 1 to 5, how do you rate the accessibility of the school's services for international Ph.D. students?

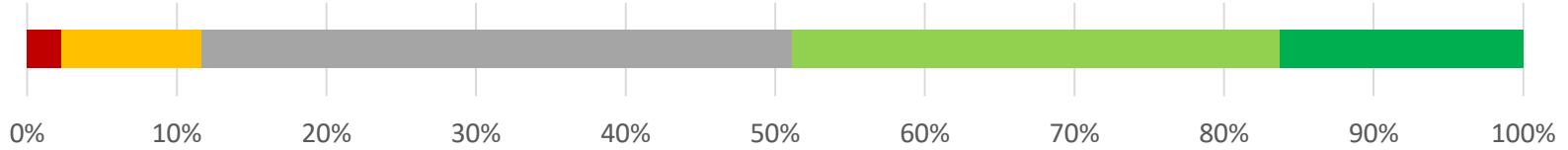


Average: **3,6**

* la note 1 exprime un très faible degré satisfaction, la note 5 reflète un haut degré de satisfaction

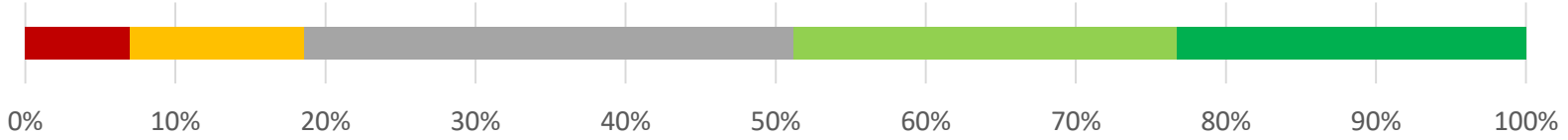
Global satisfaction

On a scale of 1 to 5, how would you rate the welcoming of international PhD students at CentraleSupélec?



Average: **3,5**

On a scale of 1 to 5, how would you rate the support of international PhD students at CentraleSupélec?



Average: **3,5**

Would you recommend CentraleSupélec in your home country or institution?
yes, for 97% of international Ph.D. students

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Thank you ☺

We only manage what we measure

Peter Drucker 1909-2005

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Break

Back at 11 am

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Grand témoin

1h 30 en anglais

- **Henrik Pedersen, Aalborg University, DK :**
  - **Henrik** is the Dean of the Technical Faculty of IT and Design at Aalborg University since 2017. Pedersen was Dean of Science from 2001 at the University of Southern Denmark prior to working at AAU. He is member of the Board of Directors of CESAER. He graduated from the University of Copenhagen with a master´s degree in Mathematics and Physics in 1980 and became a DPhil in Mathematics at the University of Oxford in 1985.

- **Keynote :** Educating Engineers of the future
  - The increased complexity of technological systems as well as the urgency to act on the grand local and global challenges demand for a more socio-technical and transformative approach to engineering. Henrik Pedersen will address how it is a matter of making synergy in the educational programs by letting students experience the inevitable interaction between technical and contextual learning first-hand. This connects to mission driven research involving partners from all over the globe.

Educating Engineers of the Future

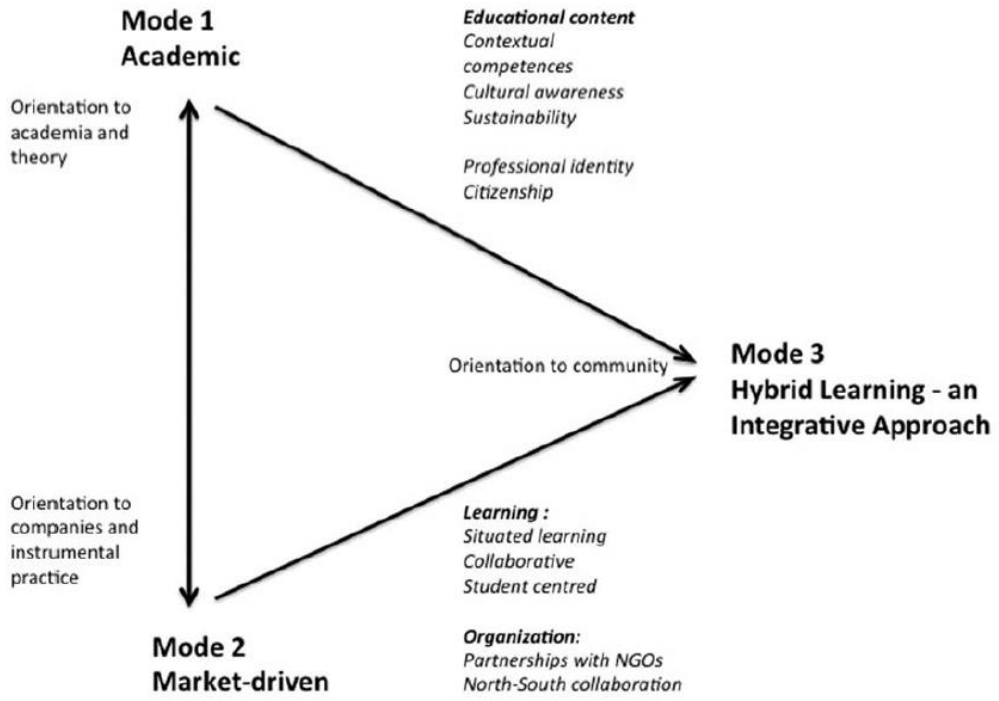
Henrik Pedersen
Dean, Professor, DPhil.
Technical Faculty of IT and Design, Aalborg University

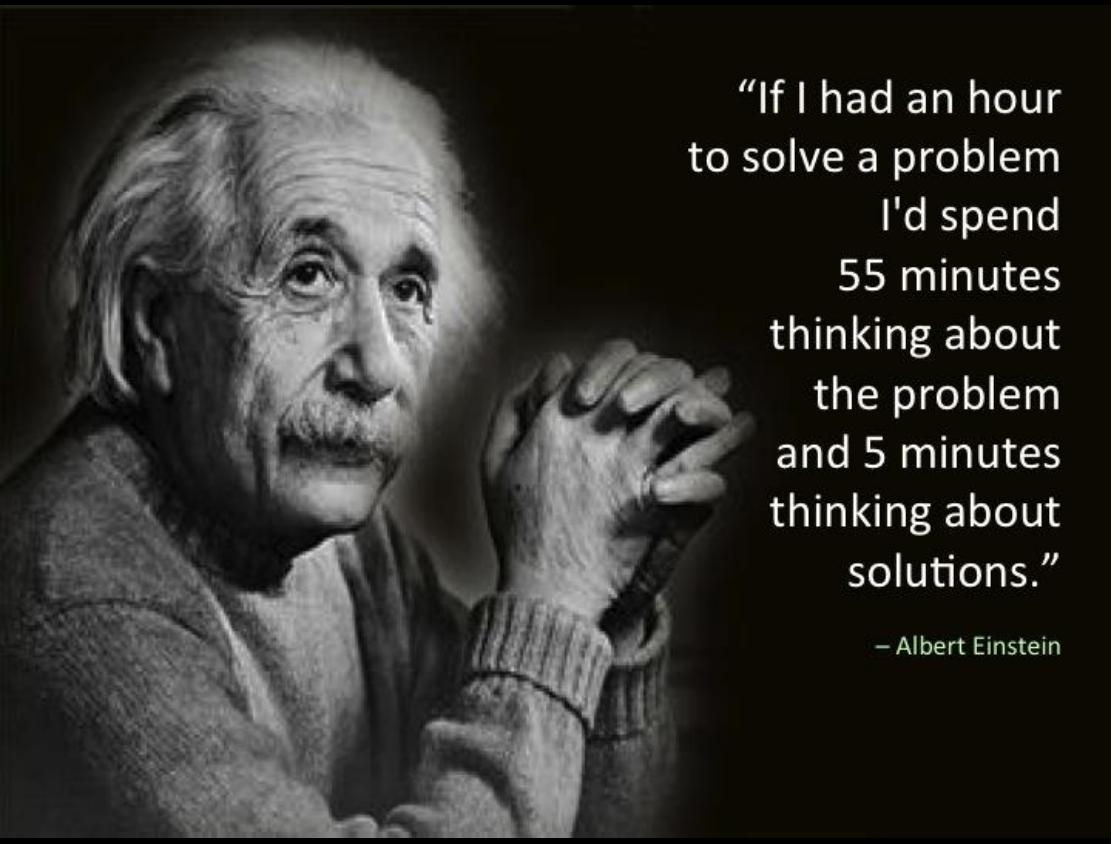
The Future of Engineering Education

A Hybrid Learning Mode

- **To capture the increasing complexity of technological systems and societal challenges engineering education institutions have to ensure that candidates can:**
  - uphold the orientation towards academia and theory (**MODE 1**) – using theoretical lenses to rethink current understandings as well as practices.
  - navigate and develop in alignment with industrial practices and prospects (**MODE 2**) – to empower and drive technological innovation processes.
  - address complex problems across different cultural contexts (**MODE 3**) based on the above mentioned modes – to contribute to solve complex societal challenges.

Jamison, Kolmos & Holgaard, 2014





Picture:
https://quotesgram.com/img/defining-problem-solving-einstein-quotes/11142719/

Some Keys to unlock Hybrid Learning

- **Inquiry based learning -** where inquiry implies a creative, active and collaborative learning process. At AAU we use a Problem based learning (PBL) framework**.**
- **Contextual learning** – where students work on authentic problems in close collaboration with public and private industries and communities. Our students are set out to learn about the contexts – not only about the subjects. Our PBL model integrates problem analysis as a core of the problem oriented project work.
- **Transformative learning** – where focus is on rethinking knowledge grounds and questioning the underlying meaning-structures – e.g. why we characterise problems as such or whether we should reshape the boundaries in which we work. At AAU, TECH students are facilitated to make reflective reports and address such issues explicitly.

Example from MIT: NEET Program

- The New Engineering Education Transformation (NEET) program was launched in 2017 to reimagine engineering education at MIT.
- A cross-departmental endeavor with a focus on integrative, project-centric learning, NEET cultivates the essential skills, knowledge, and qualities to address the formidable challenges posed by the twenty-first century.
- NEET offerings—known as “threads”—give students opportunities to immerse themselves in projects that cross disciplinary boundaries while earning a degree in their chosen major.

Climate & Sustainability Systems - Materials Machines track

Autonomous Machines

Climate & Sustainability Systems -Digital Cities track

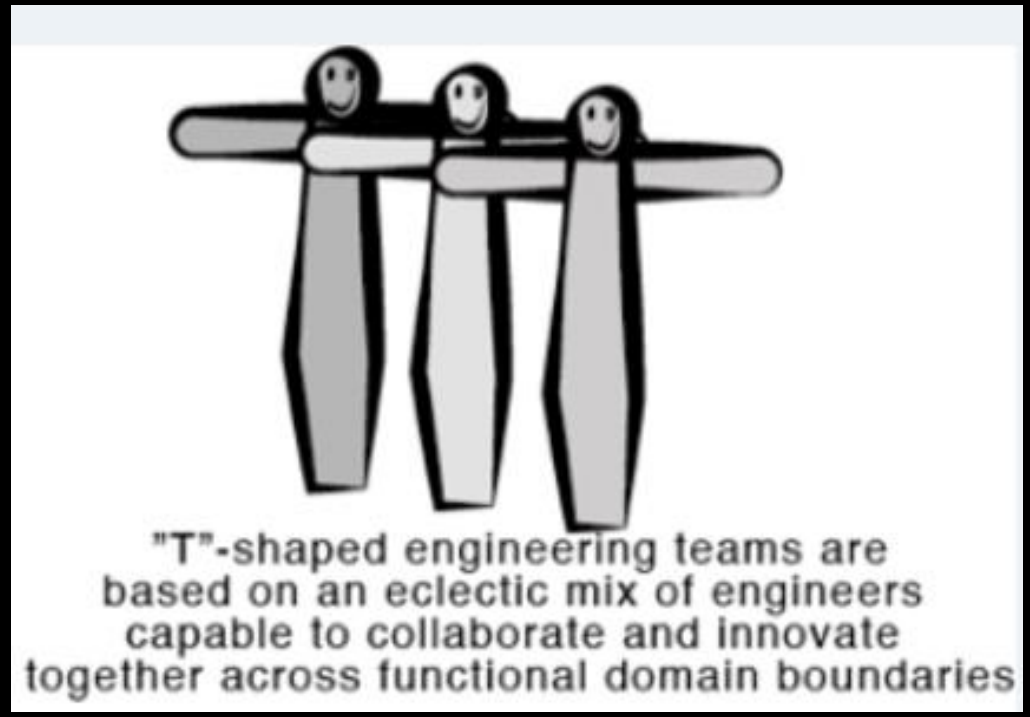
Living Machines

Climate & Sustainability Systems -Energy Transition track

The future of Engineering Education

Core aspects of a new curriculum

- **Flexibility** – making students explore the type of knowledge the problem/situation calls for**.** We work to make digital learning platforms that can guide students in their just-in-time knowledge acquisition during project work.
- **Variation** – making students explore different types of problems, different types of project organisations, different types of stakeholder-relations. We work to introduce mega-projects – making students work in interdisciplinary networks of teams to solve complex problems.
- **T-shaping** – making students experts within their field but able to *work* across boundaries. Examples of cross-cutting themes are collaboration, leadership, sustainability, digitalisation and entrepreneurship. We work to integrate SSH in STEM and vice versa to strengthens the research based approach of teaching even further.



Picture: https://www.productdevelopment.se/?p=10672

The future of Engineering Education

Internationalisation as a condition for change

- **Global challenges need global communities, and global student communities have to be nurtured. At AAU:**
  - A committed international office supports international students and staff.
  - We use our well-defined PBL model as an anchor for shared practices**.** We introduce both staff and students to PBL theory and practice, and international students are facilitated to transfer prior experience into a PBL context.

- **Global student collaborations are established and maintained in many different ways. At AAU we combine and develop:**
  - International programmes on campus
  - Projects calling for international outlook engaging students to stay abroad.
  - Digital knowledge resources and online collaborations to enhance internationalisation of our educations in courses as well as in projects.

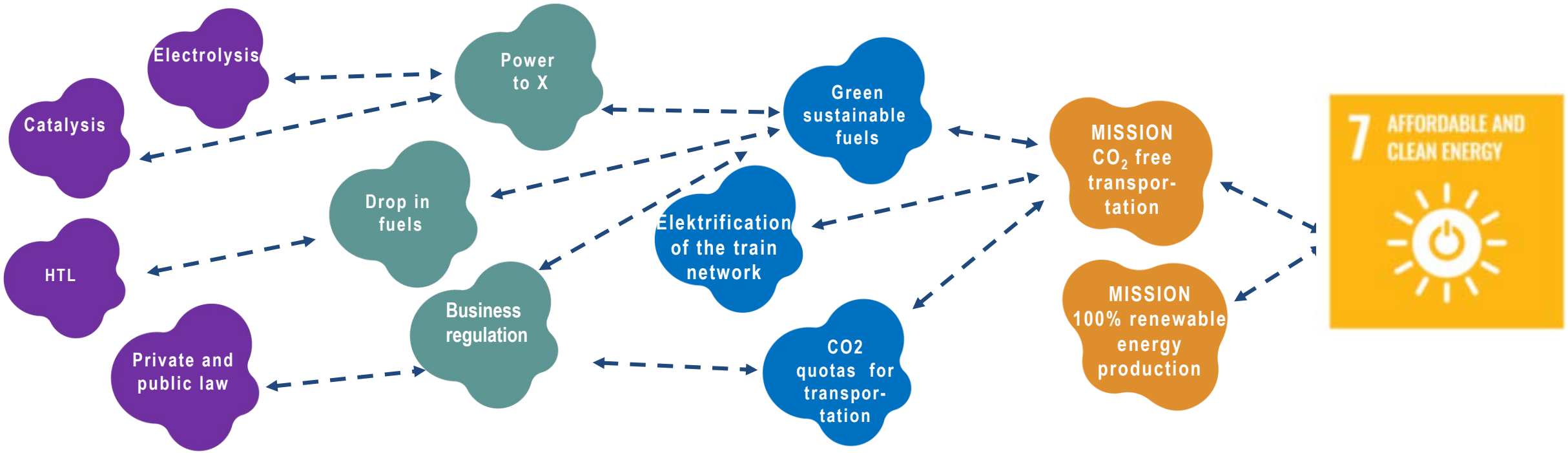
A good start at Aalborg University

- **Welcoming sessions:**
  - International Office and the AAU Admissions Office host arrival session as well as welcoming session for all new international students twice a year in February and September.
  - Arrival session: Get introduction to AAU, Aalborg and Denmark in general.
  - Welcoming session: Formal introduction and welcoming by our prorector. Possible to meet several associations like the local library, language centers, sport clubs etc.
- **Buddy program:**
  - To welcome international students AAU offers to link the international student and a buddy (a student at AAU who can help enable a good start at AAU for the international student and give information about studying at AAU, living in DK etc.)
- **An introduction to our PBL model**
- Videolink: **https://youtu.be/BSxYJODsACk**

Mission-Oriented research

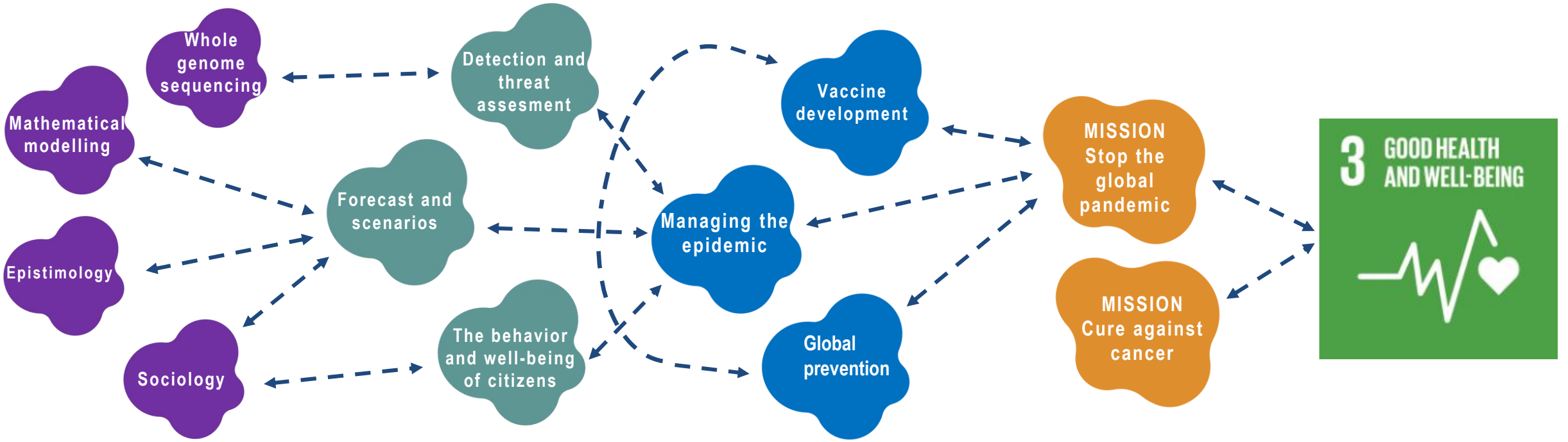
- Mariana Mazzucato
- From Mission-Oriented Research & Innovation in the European Union Manuscript completed in February 2018.

Example: Transportation



Areas with a high research competence. → Impact areas → Projects to solve the bigger problem → Political decision-makers or commitment from other actors (NGO's, businesses, universities etc.) define clear and measurable missions → Grand challenge

Example: Managing the epidimic



Areas with a high research competence → Impact areas → Projects to solve the bigger problem ← Political decision-makers or commitment from other actors (NGO's, businesses, universities etc.) define clear and measurable missions ← Grand challenge

To sum up

- **Complex societal challenges and increasing complexity of technological systems call for:**
  - A hybrid mode of learning – integrating academic, market-driven and community based knowledge modes
  - New types of learning – inquiry-based, contextual and transformative
  - New curriculum designs – enhancing flexibility, variation and T-shaping of educations
- **Internationalisation enhances hybridity as well as contextual and transformative learning – thereby it is a core aspect in future engineering curricula.**
- **The power of digitalisation in combination with face-to-face communication and in situ experiences might move future engineering education to the next level of internationalisation.**
- **Impact on teaching from mission-driven research**

Questions

Lunch Break

Back at 2 pm

Programme

- Café d'accueil 08h30 - 9h00
- Introduction Romain Soubeyran 09h00 – 9h25
- Plénière sur International et multiculturalisme 09h25 – 10h25
  - Marc Zolver et Divya Madhavan
- Plénière sur l'enquête « Accueil des étudiants internationaux 10h25 - 10h45
  - Stanislas Gagey
- Pause café 10h45 – 11h00
- Grand Témoin, Henrik Pedersen Aalborg University et échange 11h00 – 12h30
- Déjeuner placement libre 12h30 – 14h00
- Présentation en plénière des ateliers 14h00 – 14h15
- Ateliers thématiques 14h15 – 15h45
- Restitution des Ateliers Thématiques 16h00 - 16h30

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Concept

Ateliers

2h30 min français

Le cabinet HolonIQ est spécialisé dans l'intelligence des marchés, notamment dans le domaine de l'éducation, de la santé et du développement durable. **Une étude récente**, croisant une approche bottom-up à une approche top-down, a permis d'identifier 5 scénarios pour le développement de l'enseignement supérieur d'ici à 2030.

Un contexte global / un contexte CS

5 TEAMS animées par des binômes DLC/DRI

Délivrable: une vision 2030 et une feuille de route pour y parvenir

4 slides devront être proposés à la DG

- la présentation rapide du scénario
- la vision CS 2030
- la roadmap et/ou un modèle économique
- l'analyse de risques et/ou un SWOT
- Toutes les modalités d'expression sont permises (écrit, dessins et schémas, vidéos...)

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5 TEAMS

Holon IQ

Education in 2030. **Global Scenarios**

www.holoniq.com

Education-as-Usual

Traditional education institutions remain the trusted source of learning and the most effective vehicle for jobs and prosperity. Higher Education consolidates, global talent platforms emerge and government remains the core source of funding around the world.

Regional Rising

Regional alliances dominate the competitive education landscape, supported by strategic and political cooperation. Cooperative blended delivery and regional talent hubs cross-load labor supply and demand to strengthen regions.

Global Giants

This global free market environment has fostered the emergence of 'mega-organisations' with ubiquitous brand recognition and the scale to achieve significant efficiencies and industry power.

Peer to Peer

Learning online through rich, personalized human to human experiences dominates the post-secondary and skills training sectors. Blockchain technology fundamentally reconfigures credentialing and unlocks the collective creativity and IP of teachers.

Robo Revolution

AI drives a complete reversal in 'who leads learning', with virtual tutors and mentors structuring learning paths, providing assessment tasks, giving feedback, adjusting according to progress and organizing human tutoring when needed.

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230M d'étudiants en 2020
X2 d'ici 10 ans

Plus de 5.6M en mobilité internationale diplômante en 2020
10 à 15M en 2030

les principales zones de croissance étudiantes sont l'Asie (Chine et Inde...) et l'Afrique sub-saharienne.

Mobilité Entrante	K stdts	Pays d'origine	Mobilité Sortante	K stdts	Pays d'accueil
US	987	Chine, Inde, Corée, Arabie Saoudite	Chine	995	US, UK, Australie
UK	452	Chine (25%), Inde (4%), US, Malaisie, Italie	Inde	375	US, Aus, Canada, Allemagne
Australie	444	Chine, Inde	Allemagne	122	Autriche, Pays-Bas, UK, Suisse, US
Allemagne	312	Chine (10%), Inde(5%), Autriche, Russie, France	Vietnam	108	Japon, US, Australie, Corée
Russie	262	Kazakhstan(25%), Ouzbek.(8%), Turkm., Ukraine, Tadjik.	Corée du Sud	101	US
France	230	Maroc(12%), Chine(8%), Algérie(8%), Italie, Sénégal, Tunisie	France	99	Canada, Belgique, UK, Suisse, All, Espagne, US
Canada	224	Chine, Inde, France	US	84	
Chine	194	Asie, Afrique	Kazakhstan	83	Russie
Japon	183	Chine, Vietnam	Népal	82	US
Turquie	125	Syrie, Azerb., Turkm., Iran, Afghan.	Arabie Saoudite	77	US

Contexte

CentraleSupélec

- CS souhaite recruter **plus d'étudiants internationaux**.
- CS souhaite proposer **des formations de types et longueurs variables**
- **l'offre anglophone** reste peut développée en 2022.
- **le hiatus spécialiste/généraliste** reste très présent dans les préoccupations étudiantes.
- CS joue sur **4 campus**, en alliance avec le **Groupe des Ecoles Centrale** et ses implantations et dans le contexte de **l'Université Paris-saclay**.
- **le coût des études** est un sujet.
- une proportion de plus en plus élevée d'étudiants sont concernés par le **développement durable et l'empreinte carbone**.
- CS reste expert dans **le lien universités-entreprises, l'entrepreneuriat et l'innovation**.

Bon travail