



## 3<sup>rd</sup> Expert Exchange #MobilizeMinds

Discussing Joint Action on Capacity  
Development and Education in  
Sustainable Mobility

November 13, 2020

Summary Note

## Background

On Friday, November 13, 2020, TUMI and VREF invited a global selection of experts to participate in a discussion on capacity development and education for sustainable mobility. The third edition of the Expert Exchange #MobilizeMinds convened experienced partners and experts on capacity development and education for sustainable mobility in international cooperation. The main aim was to initiate a discourse and joint vision on collaborating on educational and professional development activities for a global mobility transition. The focus of the third session dealt with the scope and future of education for the transport sector.

The workshop was hosted by TUMI and VREF as an online event (see agenda in Annex). This summary note is based on individual comments and group discussions. Despite careful editing, it therefore contains the organizers' interpretation and does not necessarily represent the view of individual participants and organizations. Clarifications and edit suggestions are most welcome.

## Participating organizations

TUMI Partners (SLOCAT, WRI, ICLEI, CAF, GIZ), VREF, NUMO, CODATU, as well as several university lecturers, transport initiatives and freelance consultants.

## Objectives

The online workshop had the following main objectives:

- Gain further understanding of the existing status quo and experiences regarding educational strategies, challenges and trends.
- Take the first steps towards formulating a joint and normative vision for teaching and learning in the transport sector, incl. opportunities for curricula change.
- Develop a first overview of stakeholders and initiatives involved in university and professional education.
- Create a forum to discuss future cooperation between knowledge brokers, innovators and policy makers for providing Capacity Development and Education for Sustainable Mobility.



*Agenda and the graphical results from the working groups can be found in the Annex.*

## Key findings:

1. **Setting the scene: steps needed towards the future of education in transport**
  - In the last few years there has been an enormous demand for educated students in transport-related subjects. This has been to strengthen the local and national institutions in high- and low-income countries and to manage the impact of continuous rapid urbanization and motorization. At the same time there have been huge advances in digitalization and there is a need for urgent action tackling climate change, air pollution and road safety.
  - To meet these demands and needs it is necessary to review and update current education offerings on transport. There seems to be a lack of understanding about the current nature of teaching on transport in university education. Furthermore, universities seem to lag behind with regard to integrating the latest knowledge on new mobility trends in their curricula and lack sufficiently qualified teaching staff.
  - This is also the case in Sub-Saharan Africa, where a first stock take by VREF assessed significant national gaps. Most transport-related education happens in engineering and urban planning sectors, often without explicitly linking to sustainable mobility or modern urban transport issues.
  
2. **Online offers and e-learning can provide global outreach**

Online courses have been existing for a while (e.g. since 2010 the GIZ-supported UNITAR course Sustainable Urban Mobility in Developing Countries). With a new number of online courses accessible for everybody (by [TUMI-UCL](#), [NUMO](#), [CODATU](#), [Urban Cycling Institute](#) et al.) as well as growing number of university offers (MOOC – Massive Open Online Courses), there are many opportunities available for digital study. This can help to introduce sustainable mobility to unknown and hitherto unreached audiences (1000+ participants per course), broaden the horizon of those already engaged as well as becoming an additional way for university education. Experts can share global knowledge more easily and educate decision-makers, practitioners, and aspiring experts.

  - To make up partially for the disadvantages of e-learning, it can be complemented by opportunities to meet fellow learners and teachers as well as official certification and continued relationship-building.
  - Nonetheless, online courses are not a self-runner: every course requires resources, targets particular groups, and needs to limit its content to avoid overload and disengagement by learners. Offers benefit from interactive formats, continuous improvement through feedback loops, and passing on high-quality to a curious audience continuously. Still they only can offer a first stepping stone to a mobility transformation – in order to achieve impact at scale, other formats and modes of exchange and support remain important.
  
3. **Online education can improve opportunities in low-income countries**
  - Practicalities of access to a computer and lack of stable internet connection can make online courses less attractive. Blended learning seems to be an option in LICs (Africa specifically), as it allows for more local participation. Local staff, case studies, and building skill sets need to be involved though for it to be successful.
  - Examples: Nigerian Open University runs an online short course, but it has been hard to attract practitioners, who are more interested in physical courses. Hence a focus remains on

capacity development for practitioners in LICs. CODATU runs short courses in Togo and Morocco, have gone from 1 week in situ to 20 hours over a few weeks online.

- At the same time there is a need to increase the capacity of teaching staff, so they have the capacity and qualifications to deliver the curriculum.
- There seems to be currently a lack of publication and published materials to build a local curriculum in some LICs. By developing case studies and materials for e.g. Africa, you can contextualize the knowledge at least regionally.

#### 4. Updating curricula and changing mindsets is a generational challenge

- In order to change course in the implementation and improvement of urban mobility, decision-makers need to be exposed to new ideas and resources that they can apply in local contexts. For example, knowledge on Sustainable Urban Mobility Plans (SUMP), new mobility, low-carbon transport and climate change-resilient infrastructure planning are not widespread. In the words of one participant, "Sustainable mobility is not in the genes of existing curricula." Educators and curricula should take local case studies into consideration to allow for easier understanding of relevant actions to take, although a lack of publication and published materials to build a local curriculum/ local context was identified an issue for low-income countries. Multidisciplinary curricula may be more difficult to achieve, but the most powerful and meaningful curricula weave together tools and solutions contributed by the various disciplines. This can and should be inspired by international development cooperation.
- "When people move up the career ladder, they carry "old" knowledge if they are not forced/allowed to learn continuously." This, for example, is one reason professorships on cycling are fairly new and represented by a younger generation.

#### 5. Encourage the connection and collaboration between educators

- Building capacity and support for educators is key in the delivery of and updating of quality curricula.
- Universities can encourage collaborations and peer-to-peer learning to build capacity in educators for example through:
  - hosting national symposia
  - funding change-making professorships
  - Curricula development in a North-South cooperation between universities
  - Inter- and transdisciplinary contributions by experts
- One identified challenge to this collaboration is competition between profit-driven universities and lack of proper, publicly available documentation and context-relevant case studies. International cooperation can only partially cover these shortcomings.
- In low-income countries, it was identified that there is a high demand for transport education, but limitations in the capacity and qualifications of teaching staff to deliver curricula.

## 6. Sharing and co-creating learning materials

- In order to update curricula and change mindsets around sustainable urban mobility, create quality online learning and encourage the connection and collaboration between educators we should focus on:
  - Sharing best practice examples of university modules through networks.
  - Prepare surveys and collect materials to better understand the current education offer and support the development of and incorporation of new knowledge. Work with institutions to develop and adapt better curricula to curate and store them with open access and creative commons licensing.
  - Explore the possibility of development of regional online courses.
  - Repository/ online library of case studies, lectures/ materials that can be used by local staff. Training provided for local staff to ensure take-up and that the local interpretation of materials is done well. Curation of materials here is crucial.

## Conclusion and next steps

Current education and capacity development efforts aim to change course in sustainable urban mobility through equipping sustainable urban mobility decision-makers, practitioners, educators and researchers with the right tools and through engaging with local stakeholders. The organizers VREF and TUMI hope to continue and expand both Expert Exchange meetings to spur and unite efforts to change course in sustainable mobility.

We suggest continuing the exchange in order to:

- Meet regularly: suggested every two months for 1.5-2h on Friday afternoon CET
- Exchange both in large and smaller groups (like a bar camp)
- Discuss steps to #MobilizeMinds in topical sessions with fellow experts
- Elicit input on specific activities or areas of action
- Achieve and openly present intermediary results to further actors

TUMI and VREF are planning to continue the Expert Exchange #MobilizeMinds at a regular interval. Next date is February 26<sup>th</sup>, 2021.

## Further reading and information:

- The research findings presented during the webinar on April 21, 2020 developed a first capacity assessment of supply and demand in the sustainable mobility sector. Please find the paper "[A 250k gap? Building Capacity for the Global Mobility Transition](#)" for download as well as a [recording of the webinar](#).
- More background guidance is provided in the [=> TUMI Session Guide](#), which also offers practical tips and examples to carry out successful capacity development activities. The [=>TUMI Capacity Development Charta](#) describes core principles to adhere to.
- The [=>TUMI knowledge website](#) provides an overview on resources and further learning opportunities. More partner resources are provided here on a rolling base, including an now updated [=> online database of trainings](#) from all TUMI Partners.

- Want to learn more about how to integrate and manage different modes and components of a sustainable urban mobility for a global mobility transformation? Sign up today for our **free online course**: "Transforming Urban Mobility: Components of Transport Planning for Sustainable Cities." (start Jan 11, 2021, next run March 15, 2021) <https://www.futurelearn.com/courses/components-of-sustainable-urban-mobility> (presented by University College London, GIZ, and the Transformative Urban Mobility Initiative)



### About VREF: Sustainable transport for equitable access in urban areas

Volvo Research and Education Foundations (VREF) inspires, initiates, supports research and educational activities, and contributes to dissemination and implementation of research findings among stakeholders.

<http://www.vref.se/>

### About TUMI: Many Partners, One Goal

TUMI is an alliance of the world's leading organizations in sustainable transport. We build a community of actors to transform policies and business and advance science and society. Here lies the people power to leverage sustainable mobility worldwide!

[www.transformative-mobility.org](http://www.transformative-mobility.org)



## Annex

## Agenda

Friday, November 13<sup>th</sup> 2020

14:00 – 14:05 **Welcome (Henrik Nolmark)**

14:05 – 14:15 **Round of introductions and short updates**

### Input contributions (Henrik Nolmark)

14:15-14:40

- *Holger Dalkmann: Setting the scene: Steps towards the future of education in transport.*
- *Emma Shepherdson: Education in Urban Transport and Mobility, Sub-Saharan Africa. A first stocktake.*
- *Robin Hickman: Future of e-learning.*

### Discussion in world café style

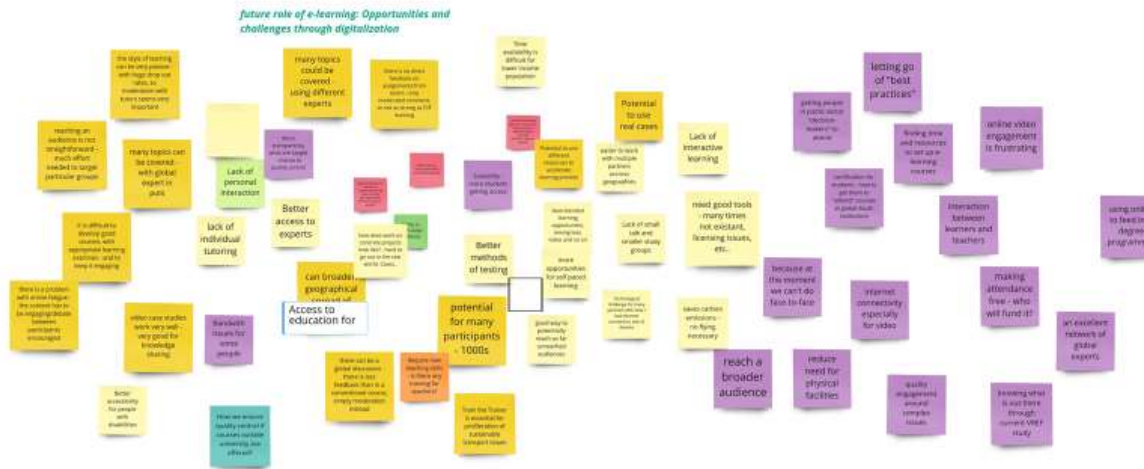
*Moderated discussion in 3 break-out rooms*

14:40 – 15:30

- The future role of e-learning: Opportunities and challenges through digitalization (Daniel Moser)
- Future of education in Lower Income Countries (LICs) (Emma Shepherdson)
- Towards a future curricula for sustainable mobility (Linus Platzer)

15:40 – 16:00 **Report back & comments, next steps (Henrik Nolmark)**

**Group 1: The future role of e-learning:  
Opportunities and challenges through digitalization**



**Group 2: Future of education in Lower Income Countries**

**Online education in LICs:**

- Online learning makes it difficult to go beyond simply understanding the content + Practicalities of access to a computer and lack of stable internet connection make online courses less attractive.
- Positives in the LIC context is the simplicity and flexibility of online courses, possibility to combine education with work and family/lifestyle, as well as ability to pool experts and resources for quality learning materials.
- Blended learning seen as the best option in LICs (Africa specifically), case studies, skill sets. Local staff need to be involved though for it to be successful.
- Nigerian Open University runs an online short course but it has been hard to attract practitioners, who are more interested in physical courses.
- Often a recommendation is to provide more MOOCs in LICs. Whilst positive, MOOCs are expensive to produce, and often therefore end up in departments that traditionally have more available budget like engineering.
- Focus should be on capacity building for practitioners in LICs. CODATU runs short courses in Togo and Morocco, have gone from 1 week in situ to 20 hours over a few weeks online.

**Curricular gaps/capacity:**

- Curricula often are still based on a time when sustainable transport was not a concept.
- Multidisciplinary curriculum – difficult to achieve, but most powerful is to weave together tools and solutions contributed by the various disciplines.
- Different education/ capacity building for different audiences. We need to reach media and politicians for them to be able to deliver the message of sustainable mobility effectively.
- Capacity of teaching staff – do they have the capacity and qualifications to deliver the curriculum? High demand from students.
- Lack of publication and published materials to build a local curriculum/ local context is an issue for LICs. By developing case studies and materials for eg Africa you can contextualize the knowledge at least regionally.
- University business models can make collaboration and online course development difficult.

**Suggestions for future of education and role of VREF/TUMI:**

- Include online courses in the VREF studies (MAC/ FoE Global) and analyse how they can complement the physical universities.
- Do we have information about who attends online courses in LICs, esp post COVID?
- There may be a space for development of regional online courses
- Repository/ online library of case studies, lectures/ materials that can be used by local staff. Training provided for local staff to ensure take-up and that the local interpretation of materials is done well. Curation of materials here is crucial.

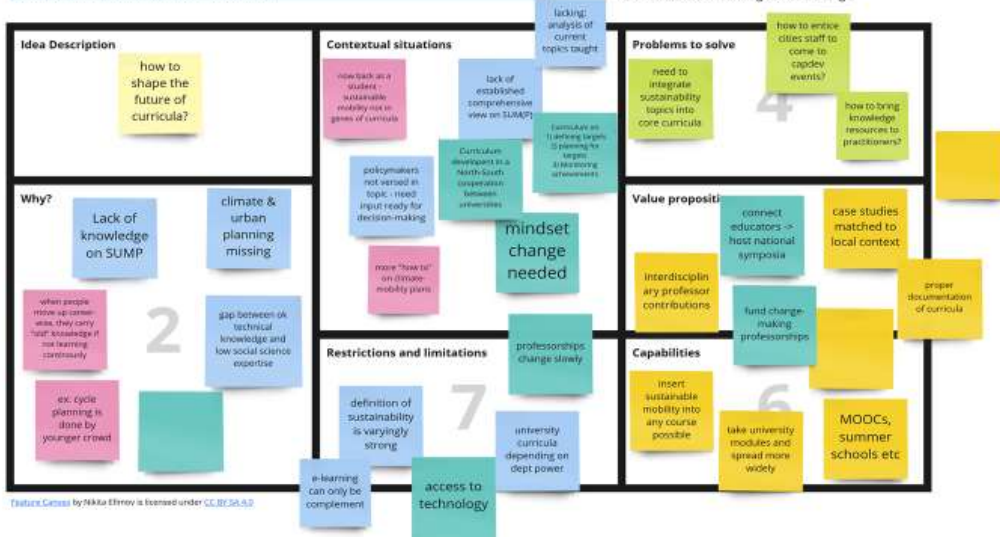


Workshop 1

**Group 3: Towards a future curricula:**  
Tackling knowledge gaps, the creation of new courses and academic and political environments surrounding curricula change.

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Input Holger Dalkmann, 11/13/2020 – Future of Education

**FUTURE OF EDUCATION – SETTING THE SCENE**

3<sup>rd</sup> Expert Exchange hosted by TUMI & VREF  
13.11.2020  
Holger Dalkmann (Sustain2030, Senior Adviser to VREF)

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**TUMI**  
Transformative Urban Mobility Initiative

A severe lack of adequately equipped staff and policy makers is holding back a global transformation towards sustainable mobility for all.

The capacity and educational gap in urban mobility

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KEY KNOWLEDGE GAPS & CHALLENGES ABOUT TRANSPORT IN UNIVERSITY EDUCATION

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KNOWLEDGE GAPS I  
TOWARDS A BETTER UNDERSTANDING ON GLOBAL EDUCATION ON TRANSPORT

Some national databases – but not fully accessible

Regional database gaps (e.g. Africa)

Towards a global database?

**VREF** Guide (2020), TUMI (2020)  
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KNOWLEDGE GAP II  
PERTINENCE OF EDUCATION IN TRANSPORT @ UNIVERSITIES

- Diversity of transport related education: Engineering, Planning, Geography
- No "Transport/Mobility" degree
- Not many bachelor degrees on Transport
- Diversity in certification of courses
- Limited interaction with demand side (industry, public authorities)

Source: Gerlich, Heise, & Ulmann, 2004

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KNOWLEDGE GAP III – SUSTAINABILITY IN EDUCATION

- Better reflect real life complexity of transport in studies
- More interdisciplinary options
- Integrating 21<sup>st</sup> century challenges
- Integration of policy, sustainability into existing programs
- Which courses to abolish???
- Sufficient teaching capacity?

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### KNOWLEDGE GAP IV – FUTURE ROLE OF DIGITAL LEARNING?

- E-Learning as an addition to close knowledge gaps?
- Future of education – online – hybrid – or BAU (After COVID-19)
- Business model for universities as a roadblock?



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### KEY QUESTIONS

- Is there an educational gap? Does a better stocktake will be a useful contribution? What could be actions to close the Educational Gap particular in Low Income Countries?
- How to ensure latest knowledge is part of the Educational System?
- How E-learning can help to close the educational as well as the knowledge gap?

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### Thank you for your attention!

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### BACKGROUND PAPER

<https://www.transformative-mobility.org/news/new-publication-online-a-250k-gap-building-capacity-for-the-global-mobility-transition>



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