A TRAIN-THE-TRAINER COURSE

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Introduction

Work package 6 of the SaferAfrica project aims to identify training needs and develop capacity building programs focused on road safety in African countries. Part 2 of WP6 concentrates on train-the-trainer activities for universities. The main objective was the development of a train-the-trainer manual in the way that trainers and future trainers will be provided with the necessary tools and skills to prepare their own road safety courses. This manual was developed in 2018 and is now available as Deliverable D6.2. (Sanon, C. et al., 2018).

The first part of the Manual presents basic information about the 'nature' of road safety and the Safe System approach, as well as how this knowledge can play a part in the education of different professionals. Special attention was given to road safety audits and inspections.
The second part deals with the methodological and didactics of teaching this specific content, mainly focusing on the definition of learning outcomes and the specificity of the learning processes in adults.

Giving training is however a matter of more personal competences and not only of technical skills. Providing a manual is important and can give future trainers a good support, but it is not enough. Competences are acquired through exercises, experiences and concrete and constructive feedback. For the above reason, in an early stage of the development of this manual in task 6.2, the workgroup decided to develop also a real Train-The-Trainer course, based on the Manual. In order to take the most of this trial, it was decided to develop a real course in Africa, to see if the foreseen approach was the most appropriate. After discussions during the project meeting in Abidjan (November 2018), the possibility was created in Cameroon in coordination with task 6.4 (twinning program on research capacity needs).

In this annex of the Deliverable D6.2, an overview of this try-out version is detailed. In the first part of this document, the preparation of the course is discussed (aims, suggested program, target group and how we invited participants).
A second part describes the course, detailing the content and the adaptations we made during the course.
The third part is meant as an evaluation of this course. Both feedback of the participants and experience of the three trainers are presented. The most important information from this section is related with the lessons we could learn from this first try-out, which will lead us to a few suggestions and a canvas for further TTT-initiatives (last part).

1 Developing a Train-The-Trainer course

Tackling road safety problems demands in most cases a cooperation between many different professionals and institutions. Although these professionals are well educated in their own field of expertise, their knowledge of specific road safety issues is limited. This was already stated in the deliverable on capacity building needs (D6.1) and is also in accordance with the work in task 6.3 (capacity building initiatives for public bodies).
Road safety training courses supply is available but most of these are initiatives of non-African organizations and have a more general, basic approach. To partially overcome this fragility, several e-learning courses were developed within the SaferAfrica project (WP6), which give a very broad but basic content for road safety professionals.

On the long run, it would be more appropriate that education on road safety issues could be build in as a part of the normal curriculum of some specific professionals, or as a regular kind of extra course in several African schools or universities. This gives more guarantee that every professional dealing with road safety issues gets specific education on this complex subject, and that the content of this education is based on the local (country, region) needs and specificity.

This requires well trained road safety experts with an expertise in teaching and transferring knowledge. It is in this idea that a Train-The-Trainer course becomes a necessity.

In this chapter we will present the following topics:

- The aim of the TTT-course
- The program, specific learning objectives of each course part and the methodology
- The definition of the target group of the TTT-course
- The practical aspects in the preparation of the course.

The aim of the TTT-course

The train-the-trainer course in his original concept was defined with two main objectives:

1. To inform (future) teachers (high level education) of the relevant body of knowledge that exists in the field of road safety, applicable to the African context that needs to be transferred to future African experts.
2. To provide (future) trainers with the necessary tools to transfer this knowledge.

In what concerns the relevant body of knowledge, it is important to have in mind that the Train-The-Trainer course has not the pretention to give a full curriculum of road safety issues. We started with the assumption that the target group for a TTT-course consists of professionals with already a good background on road safety (based on their own education or experience). On the other hand, there is a lot of material available which focus on road safety issues. Thereby, we focused on a general

frame work, having in mind that different types of professionals have a role to play in road safety and that each one of them needs a specific education on knowledge and skills.
The tools to transfer knowledge also differ according to the audience. The TTT-course was not developed to be a basic education for teachers; yet it was focused on specific issues and methods to develop a road safety course for students. Central in this objective was the search for specific learning outcomes and content for each group of professionals.

The main question in this TTT-course could be formulated as:

> *"How can I prepare a **well-focused** road safety course for my **own student** group with the right methodology and **approach**?"*

This leads us to the following four learning outcomes for this particular TTT-course:

- By the end of the course, the participants will be able to **define different learning outcomes** for their future students, depending of their professional domain.
- By the end of the course, the participants will be able to **applicate the learning cycle** of Kolbe (and the taxonomy of Bloom) in their course structure.
- By the end of the course, participants will be able to choose **the most appropriate methodology** for different content (knowledge and insight, skills and application).
- By the end of the course, participants will be able **to build a frame work** for a road safety course adapted to a specific group of future experts, based on the defined learning outcomes and taking into account the different didactical principles.

The program

The first draft of the train-the-trainer manual, from March 2018, included a higher detail, mentioning the need of a 5-day course: 2 days for the road safety content and 3 days for the more methodological and didactical competences. This approach was fine-tuned, based on the available resources, and possible target audience and was reduced to 3 days with a minimum focus on the content (aim 1) and a maximum focus on the competences and skills (aim 2).

Tables 1, 2 and 3 present an overview of the planning and the main objectives in each session of the course.
The different PowerPoints are presented in Annex.

Table 1: Preset program of the first day of the TTT-course in Cameroon

Day 1	Title	Description
9:30	Introduction	Situating the course in the SaferAfrica project Thanking the different organizations (ENSTP, CTL, the Ministry of Public Works Some practical aspects of the course
9:50	Presentation of the participants	Knowing their expectations Have a first impression about their presentation skills
11:00	Coffee break	
11:20	Course program and feedback	Making links between expectations and program First general feedback on presentation styles
11:35	Introduction to road safety (PowerPoint 1)	RS as a complex phenomenon The 5 pillars of the WHO The three E's (engineering, education, enforcement Safe system approach
12:15	Lunch	
13:30	Who is involved in RS? (PowerPoint 2)	Overview of different professionals involved in Rs More detailed description of their role and see links between different professionals General idea of what they need for training
14:00	Learning outcomes (PowerPoint 3)	What are 'learning outcomes'? How to define them? Differences between 'knowledge', 'competences' and 'attitudes'
14:30	Groups work	Defining concrete learning outcomes for different professionals. Groups are formed on basis of their background.
15:00	Coffee break	
15:30	Groups work	Continuation and presentation
15:50	What did we learn today?	Short summary and a little learning game 'out of the box'
16:00	End of session	

Table 2: Preset program of the second day of the TTT-course in Cameroon

Day 2	Title	Description
9:30	Introduction	Short summary of day 1 / answering questions or remarks
9:45	Training time management (PowerPoint 4)	How to estimate the duration of a training module? How to manage the training time – practical examples?
10:15	Defining content	From learning outcomes to content
10:40	Group work	Continuation of the work group of day 1, and going a step further: from the defined learning outcomes to the real content of a course.
11:00	Coffee break	
11:20	Presentation of the results	Presentation by the participants and feedback from the other groups and the course leaders.
12:15	Lunch	
13:30	Learning process (PowerPoint 5)	Learning cycle of Kolbe Effectivity of courses / some general principles and approaches to make a course effective.
14:00	Working with e-learning modules	Overview of what already exists, with more attention for the e-learning modules of SaferAfrica How you can work with e-learning?
14:50	Coffee break	
15:10	Case studies (PowerPoint 6)	Working with real cases, in and out of the classroom – what is possible, some examples.
15:50	What did we learn today?	Short summary and a little learning game 'attention test'
16:00	End of session	

Table 3: Preset program of the third day of the TTT-course in Cameroon

Day 1	Title	Description
9:30	Introduction	Short summary of day 1 / answering questions or remarks
9:45	Implementation of a RS course	Overview of the possibilities and the obstacles to organize a RS course in the existing curriculum or as an additional training
10:30	Evaluation of a course/training: process evaluation	What can a trainer learn from the reactions of his students? The process of renewing and adaptation: possibilities and limits.
11:00	Coffee break	
11:20	Evaluation of students at the end of a course	Possibilities for evaluation, different methods referring to knowledge, competences, attitudes
11:50	Available materials (PowerPoint 7)	Overview of the existing handbooks, materials, websites, with relevant information for trainers and trainees concerning road safety Special attention is given to the SaferAfrica website and platform
12:30	Lunch	
13:45	Final conclusions	Link with expectations from the first day Evaluation of this course Filling in th evaluation form
14:30	Closing ceremony	Handling over the certificates
15:30	closing	

The invitation procedure

The course was organized in the "Ecole Nationale Supérieure des Travaux Publics (ENSTP)" in Yaoundé, Cameroon. Because we expected that also experts from other countries would be participating, the language was set to be in English. All documents and presentations were prepared in English.

The participation in the course was for free (no fee was asked). Trainer's fee and the necessary travel and accommodation costs were funded by the SaferAfrica project by each institution. Lunches and coffee breaks were also paid by the general project resources.

Accommodation and travel cost for the participants were not covered by this project and had to be paid by the participants (or their organization, institute). Probably this was the reason that only Cameroonians took part of the course.

Participants were trainers from the universities of Cameroon, and from the main organizations involved in Road Safety. They were selected and invited by the Ministry of Public Works of Cameroon, to attend the Train-The-Trainers' course. To be shortlisted to attend to this course, the

potential candidates were to be holder of at least a Master degree, and be involved in training in his institution, in a domain to road safety.

The list of participants included 25 persons from different organisations, as presented in table 4.

Table 4: overview of the participants and their organization.

Organisation type	Organization name	participant
School / university	ENSTP- Yaoundé	Pr Madja Doumbaye Jérémie Dr. Matcheubou Alice Mr. Limaleba Roger Blaise Dr. Feumo Achille Germain Dr. Aba Nkasse Alain Mr. Ngati Emmanuel Pivaga Mr. Bomela Milaire Dr. Talla André
	University Douala	Dr. Bahoken Valeri Lesmont Dr. Zogo Tsala Simon Armand Dr. Banjdokotok Missikon Silvère
	University Yde I	Dr. Mabou Paul Blaise Dr. Ngaba Mballa Omive Marie Nicole Epse Mambo Pouka
	University Dschang	Dr. Tchekote Hervé
	CTL	Mme Kunsoan Noella Bajia
Ministries	Ministry of Transport	Mme Manto Teignegou Epse NSO Ngang Claudia Mr She Nkoa Jean Baptiste Landry
	Ministry of health	Mme Munji Laura Yensinkem
Others	ANOR	Mr. Foka Jean Pierre
	DGSN	Cre Ananfack Bernard Cre Enama Tsang Anselme Hubert
	Cel BAD-BM	Mr. Njontu Maurice
	SED	Cdt Nna Nkoto Junior Joris Ivens Cne Engamba Eba'A Charles Jerry
	CONAROUTE/SPM	Mr. Ndjinkam Mama Deésire

2 Description of the course as enrolled in Yaoundé.

Since this course was conceived as an interactive training, the prepared program was considered more as a guide and not as a strict plan. Strict were the starting and closing times of each day, and the content that was specifically focused on developing a training. But the time that could be spend on each topic was flexible, the same for the order of the different topics.

In this chapter we will discuss the real enrolment of this first 'try-out' course in order to learn and to develop a more suitable and effective version of the train-the-trainer course.

Description of the first day

In general, the program of the first day, particularly during the morning, could be enrolled as initially planned. In the afternoon the program was shortened, due to practical problems on one hand, and the important discussion during the group work during the afternoon, on the other.

The most important remarks and observations from the different sessions concerned:

Expectations of the participants

When the participants presented their expectations about this course, it came quickly clear that not everyone has well understood the main objective of this course. For some of them, a train-the-trainer course would offer a more specialized knowledge (and competences) in road safety issues. Examples mentioned were:

- Having more insight in the different kind of road accidents
- More knowledge on statistical analyses
- Information on how to influence governments to take action in road safety.

Other participants' expectations were more in line with the aims of this TTT-course: they wanted to learn more about how to develop a road safety course adapted to their own students.

A second ascertainment during this presentation had to do with the enormous diversity of organizations and background. This could be an interesting fact to promote co-operation and to understand the broadness of the domain of road safety. At the same time, it could also make it more difficult to come to real and applicable results.

Introduction to road safety

Taking the expectations and the discussion during this presentation into consideration, it seems that this introduction was very necessary and needs probably more space within the course. Several participants had already a good background of road safety, others were only indirectly educated on this matter, even if their job was related to road safety.

Who's involved in road safety?
Striking was the discussion between the participants concerning the cooperation between different kind of professionals. Although everyone agreed that a lot of professionals are involved in road safety, most of them were thinking in strict separated competences. For example: police force is only involved in enforcement activities and accident data. The idea that police officers could also give some 'professional' advice in planning and readapting infrastructure was difficult to accept by all the participants.

During the group work, the participants had to indicate which issue would be important to include in the training of the different professionals. As a guideline, the list of the questionnaire used for deliverable 6.1 was used. The fact that the groups were too big (8 persons in a group) made this discussion extra-long. It took nearly the rest of the afternoon and we even got no time to share different results with the rest of group.

The session about learning objectives was, as so, transferred to the next day.

Description of the second day

The program for the second day was changed, due to the time consuming session of the previous day and the health problems of one of the trainers, who staid absent during the afternoon.

The following discusses the important remarks and observations of the different sessions.

Learning outcomes
For most of the participants this was a good summary of what they already knew, although the frame work was a little bit different. The link with the taxonomy of Bloom was most appreciated.

Defining content of a course
Different possibilities to define and organize the content of a course were presented. Special focus was given to interactive formats and on-site visits associated with real cases analysis work groups.

Training time management
This session included consideration about basic terminology, the main determinants of the duration of training and the available tools for training time definition. A practical application exercise was developed.

Working with e-learning modules
This session included the overall presentation of the inventory of e-learning courses made within the SaferAfrica project, and other e-learning courses available worldwide. The e-learning courses developed specifically for the project were also presented, with a brief visualization of one of them. To complement this information, the Coursera platform was described, with the enrolment in one course. Participants were able to see the structure of the courses available in Coursera, and the possible interaction with a tutor and the other colleagues. Finally, the moodle platform was also

presented, as a digital support for classes. This platform allows to upload documents, which students can easily access; communication between students and teacher is also possible.

Description of the third day

The program for this day was also adapted as a result of the previous days.
The following discusses the important remarks and observations of the different sessions.

Learning process in adults
Due to the fact that we did not found enough information to develop a discussion scheme, the topic of 'implementing a RS course' was cancelled. This gave us more space to elaborate the session on learning processes with a few more specific psychological issues concerning training and education.

Evaluation of a course part 1 and part 2
This session was made without a PowerPoint presentation. It was more a discussion with the different participants on all the possibilities to evaluate a course. More accent was put on alternative evaluation procedures like self-evaluation, group evaluation, project instead of exams, amongst others.

Available materials
By presenting different websites and the available handbooks and other materials, participants receive a lot of background information that they could use for their own training. It was much appreciated. Safer Africa website was also presented. All the participants were invited to register into the dialogue platform to increase road safety worldwide communication.

3 Evaluation of the course

To evaluate this first try-out version, we used two sources: first of all the reactions and the reflections of the participants and secondly the reflections made by the trainers themselves during and after the course.

Evaluation by the participants

At the end of the course, an evaluation form was given to the participants, which included the following four questions:

1) What was the most important item in this course?
2) In which way could this course help you to be a "teacher" in road safety?
3) What did you missed in this course?
4) In which way did you appreciate the used methodology in this course?

The choice to work with open questions was chosen to create a broad perspective and to really have the well-lived experience of the participants. This made it more difficult to analyse these answers, but it gives a lot more information.

Question 1: "what was the most important item in this course for you?"

All the different answers could be classified in four categories:

- Skills to prepare a course. More specific: how to define learning outcomes, the taxonomy of Bloom and time management.
- Methodologic (didactical) aspects. More specific: learning cycle, how to make a course interactive, new methods, how to make sure that a message will be understood.
- Personal learning aspects for trainers. More specific: the different ways to find documentation (for ex. E-learning), 'think out of the box', self-evaluation of the "teacher", different domains of road safety, insight in different kind of accidents, ….
- Some more relational aspects in teaching: to put yourself in the 'mind of the student', how to motivate students.

Figure 1 presents an overview of the frequency of the most important answers to question 1 gave by the participants of the course.

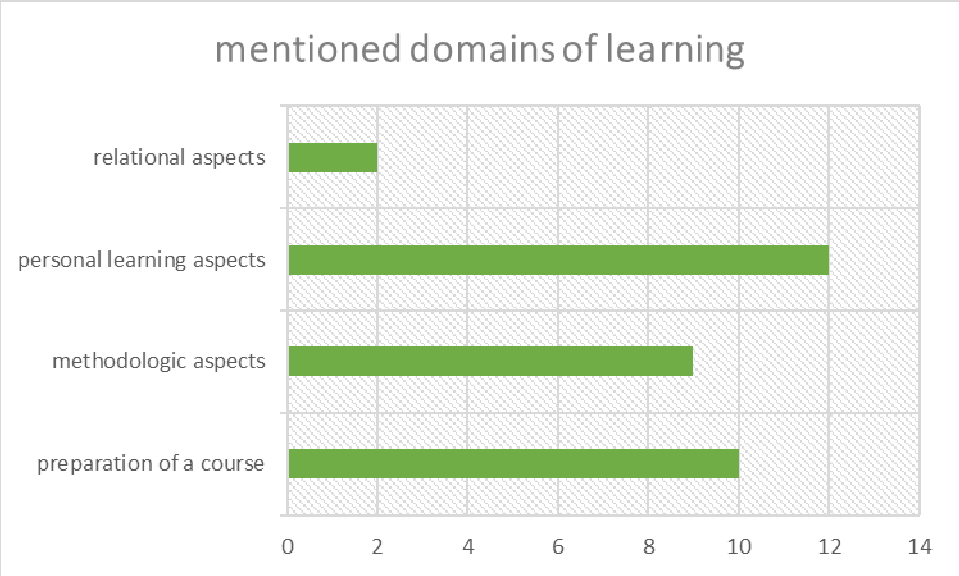


Figure 1: frequency of the most important items in the course.

Question 2: "In which way could this course help you to be a "teacher" in road safety?"

Using the same classification, more importance was given to issues that cover the initial aims of the TTT-course, namely the preparation of the course and methodological and didactical aspects. The answers frequency to this question is presented in Figure 2.

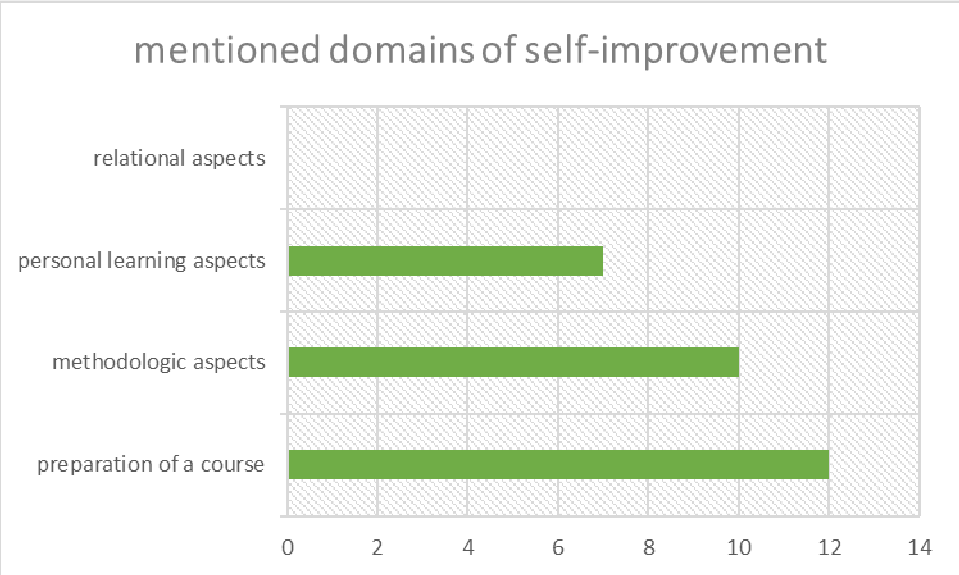


Figure 2: frequency of the issues that were experienced as 'helpful'.

In the domain of 'preparation'; people mentioned time management and the focus on the learning objectives as more specific issues.

In the domain of methodology the main score lays on 'how to transmit information'. Also evaluation technics and 'how to manage a group' were mentioned, each by one person.

Concerning the personal learning aspects, a better understanding of road safety and the broader background were frequently mentioned.

Question 3: "What did you missed in this course?"

The answers to this question can be presented in detail as follows:

Missing content

Three aspects were mentioned by more than 2 persons: 1) Road safety contents, 2) sociological aspects of RS, and 3) specific examples of Cameroon.
Five people indicated also that there wasn't enough differentiation in the content, regarding the fact that there were many different professionals around the table. Some mentioned that the course was too general.
The fact that there was no information on long-term courses was also mentioned as a missing point.

Reactions on the work groups.

Although in general, the idea of working with short presentations and discussion or working in small groups was appreciated, there were some remarks about performance.
The time spent with the groups was too short and the missing feedback and plenum discussion afterwards was missing. Some people mentioned that during these discussions discipline and punctuality was missing, and that it was going in the direction of an endless debate.

Practical issues.

Some remarks were given on more practical issues. A few people mentioned that they preferred to get the documentation (slide handouts) in advanced (and not after the course).
There were some remarks concerning the used language (speaker and slides are in the same language – most English). And due to the large room and the limited screen, some slides were not visible enough.

Answers on this question were sometimes mixed with the ones on question 4 (In which way did you appreciate the methodology used in the course?).

Question 4: "In which way did you appreciate the methodology used in this course?"

The general appreciation of this course was positive. The idea of having short presentations and a possibility to discuss things, in plenum or in small groups was on itself a well appreciated method. Figure 3 shows us the overall appreciation, although not everyone has used the same words.

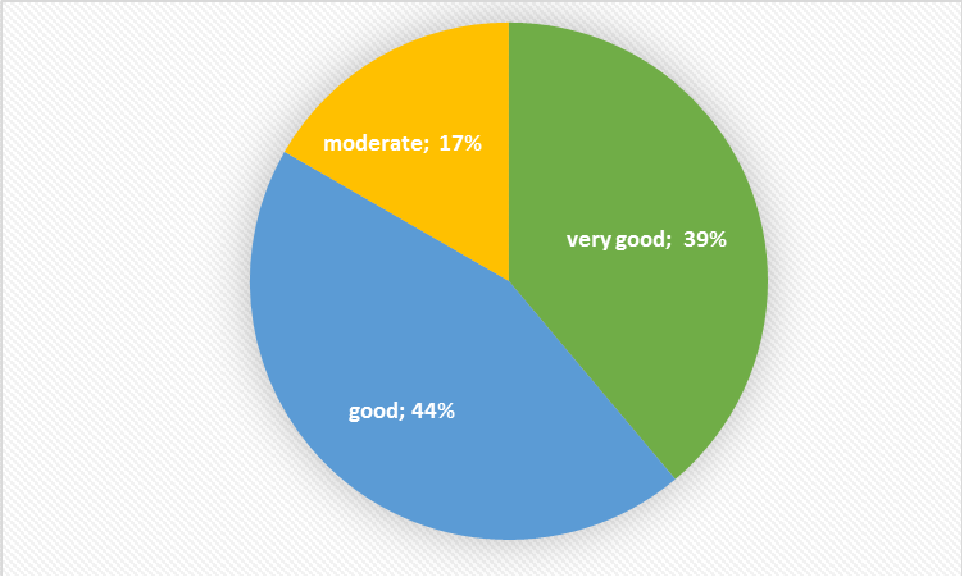


Figure 3: General appreciation of the course by the participants

Comments from the trainers.

Differences in interpretation of a TTT-course.

At the beginning of the course, it became clear that not all the participants had the same expectations of the content of the course. Some participants interpreted a train-the-trainer course as a more specialized road safety course and hoped that it would focus on road safety management, data analysis and policy. Others had expectations that were more in line with our objectives.

Although the original course objectives were maintained, it was not an easy start position and it could have influenced the different group works during the course.

The size of the group

Our aim was to make the course very interactive with several moments of group work in order to improve personal feedback on presentation techniques, and for this we had originally planned to work with a group of 20 (maximum 25 people). Nevertheless there were officially 25 participants which created some time constraints, namely group discussions took more time and there was not enough time for a more personal feedback.

Group dynamics

From the beginning it was very clear that participants were eager to learn and to discuss different topics. The group dynamics can be described as a strong energy and a readiness to reflect on their own situation and knowledge.

The fact that the group was very heterogeneous, with participants from different sectors of activities, improved the sharing of experiences.

General outcome

The fact that they came from different organizations involved in road safety was very important because everyone had received skills and tools that will help them to prepare and to deliver courses on road safety to their own target groups.

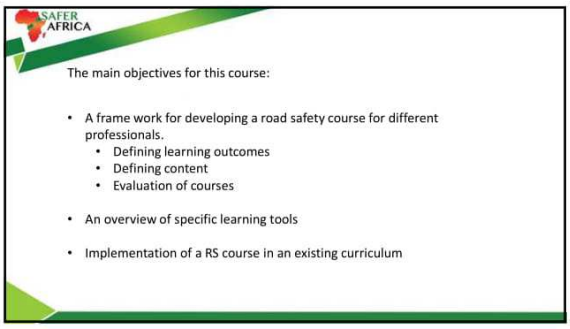
4 Results and recommendations

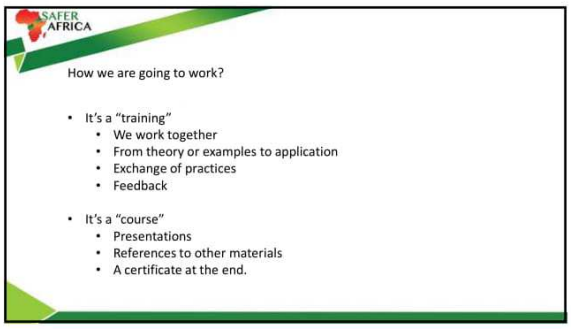
Based on our experience and the feedback from the participants, this 'try-out'-course gave us the necessary information to design a more appropriate course model. As so, we were able to present the following recommendations for future Train-the-Trainer activities:

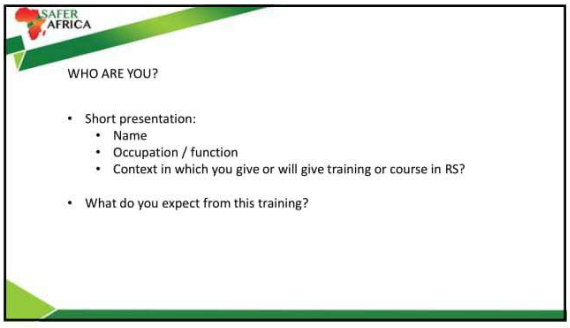
1. It looks more and more important to provide to the candidates a very concrete and clear description of the objectives of the course. We have to avoid that people come to the TTT-course only to get more information on road safety issues. A TTT-course as we have developed is focused on 'how to transfer knowledge and competences about road safety to students and professionals. It is more about the pedagogical approach.
2. Nevertheless, our first idea of organizing a 5-day course seems to be more adequate. Some more basic notions on road safety could get more attention.
3. If we want to stay with the idea of a real interactive course, it would be better to limit not only the number of participants, but also the diversity of the participants. A possible solution could be to develop a course module for trainers (or future trainers) in more technical professions (engineers, architects, urban planners, …) on one hand, and a separated module for professionals in human sciences (education, communication, policy, enforcement, …) on the other. This would allow to focus the content on more relevant issues for each group and it would make the exchange between the participants more effective.

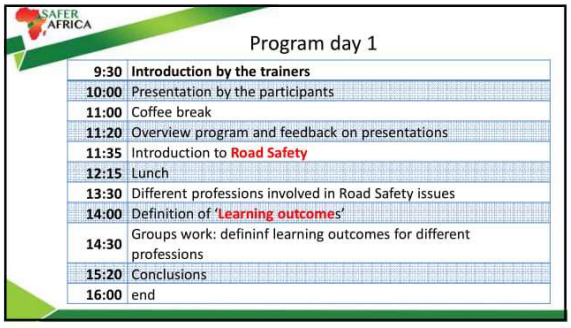
ANNEX

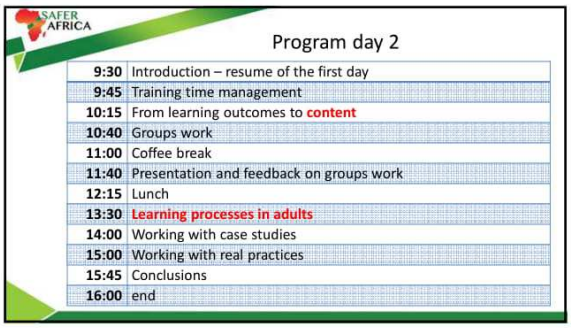
WELCOME PRESENTATION

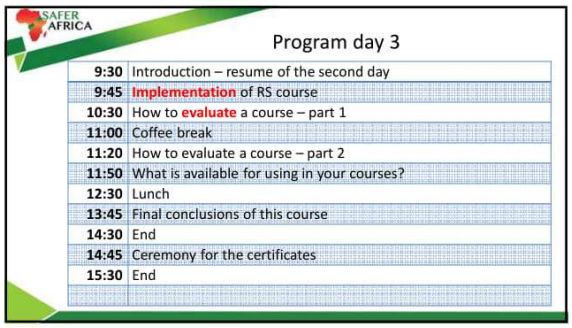




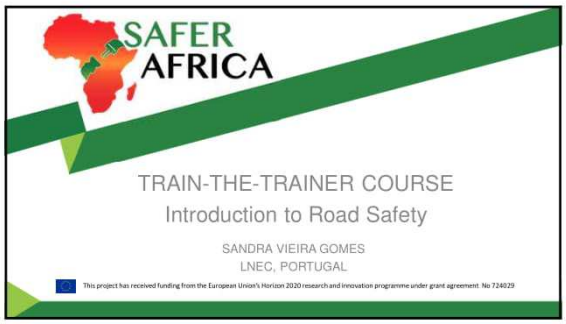


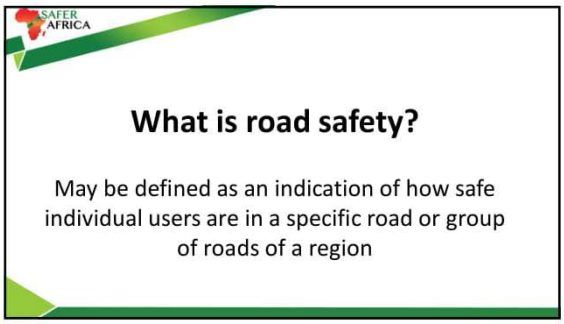


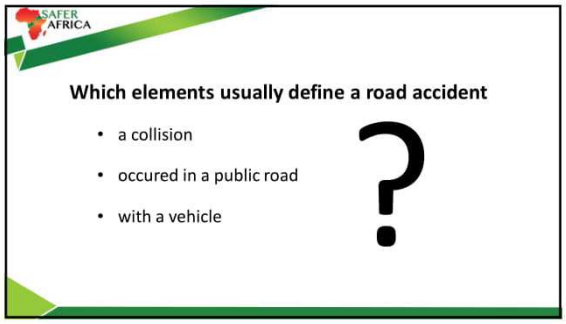

SAFER AFRICA
Program day 2
9:30 Introduction – resume of the first day
9:45 Training time management
10:15 From learning outcomes to content
10:40 Groups work
11:00 Coffee break
11:40 Presentation and feedback on groups work
12:15 Lunch
13:30 Learning processes in adults
14:00 Working with case studies
15:00 Working with real practices
15:45 Conclusions
16:00 end

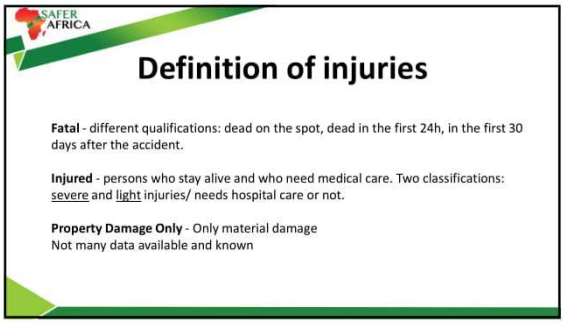

SAFER AFRICA
Program day 3
9:30 Introduction – resume of the second day
9:45 Implementation of RS course
10:30 How to evaluate a course – part 1
11:00 Coffee break
11:20 How to evaluate a course – part 2
11:50 What is available for using in your courses?
12:30 Lunch
13:45 Final conclusions of this course
14:30 End
14:45 Ceremony for the certificates
15:30 End

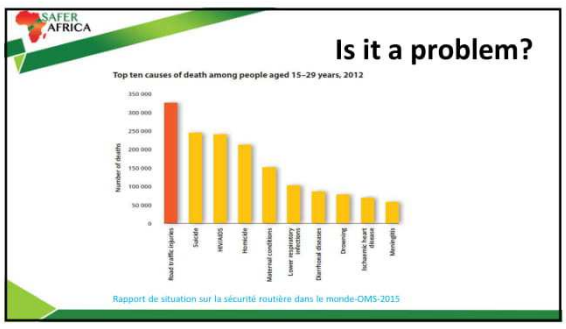
INTRODUCTION TO ROAD SAFETY

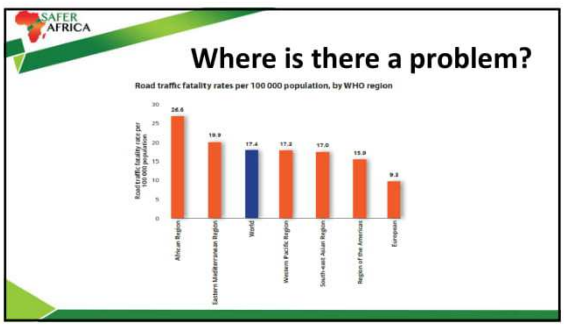






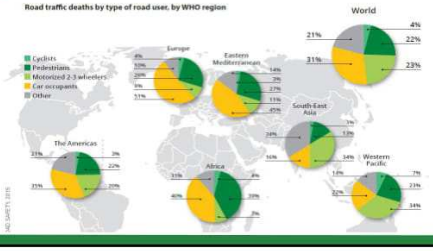




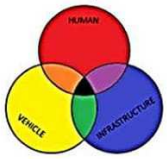


For whom?

Road traffic deaths by type of road user, by WHO region



On the basis of the road safety problem we can identify 3 elements



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 724029

SO HOW TO IMPROVE IT?

Different approaches…

- The 3 E's of road safety: Engineering, Education and Enforcement
- The five Pilars of Road Safety defined by WHO

3 E's of road safety

Engineering

More than building roads faster and complying its design with standards, we need to work on the concept of forgiving roads, which ensures minimum danger to a road user even in event of accident.

Education

Education of people of different ages about the best practices, guidelines and regulations is crucial. Campaign presentations and Publicity & radio Advertising, documentaries, films, booklets and posters can be used to improve awareness.

Enforcement

Police enforces and law courts are responsible for penalizing the person not making up to the rules, which acts as a learning lesson for offender. The stricter we implement the laws the safer we will make the roads.

Five Pilars of Road Safety from WHO

Defined for the Decade of Action for Road Safety 2011–2020

World Health Organization

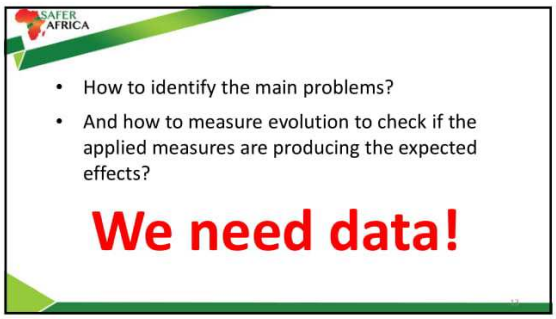
National activities				
Pillar 1 Road safety management	Pillar 2 Safer roads and mobility	Pillar 3 Safer vehicles	Pillar 4 Safer road users	Pillar 5 Post-crash response
International coordination of activities				

https://www.who.int/roadsafety/decade_of_action/plan/en/

Five Pilars of Road Safety from WHO

The goal was to stabilize and then reduce the forecasted level of global road fatalities by increasing activities conducted at national, regional and global levels.

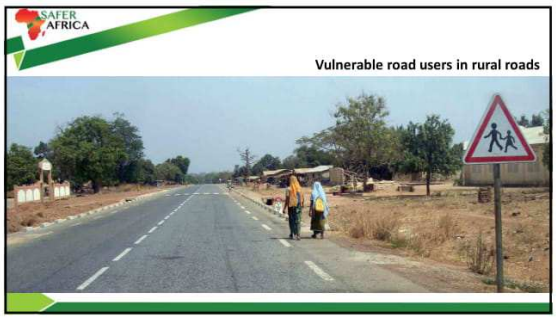
Indicators have been developed to measure progress in each of these areas.

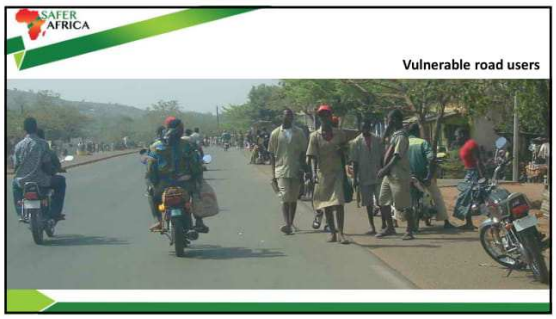

SAFER AFRICA
How to identify the main problems?
And how to measure evolution to check if the applied measures are producing the expected effects?
We need data!

SAFER AFRICA
Accidents and victims
With the highest desegregation possible, but consistent in all the country
Road user related risk factors
speed
Drink driving
Failure to use helmets
Failure to use safety belts
distraction
Drug driving
Child restraints

SAFER AFRICA
Road user related risk factors in your country?
overloading
Shops on the side walk
motorcycles
Mixed transport
Slow vehicles
Street peddlers
Groups of animals

SAFER AFRICA
Non-separation of different road users


SAFER AFRICA
Vulnerable road users in rural roads

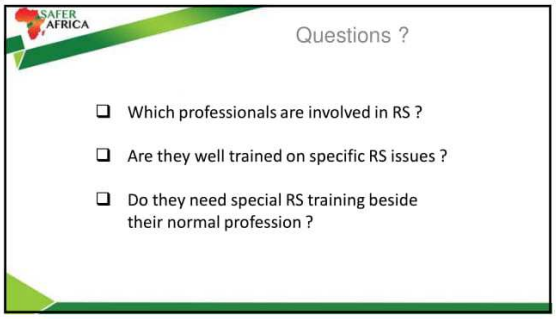

SAFER AFRICA
Vulnerable road users

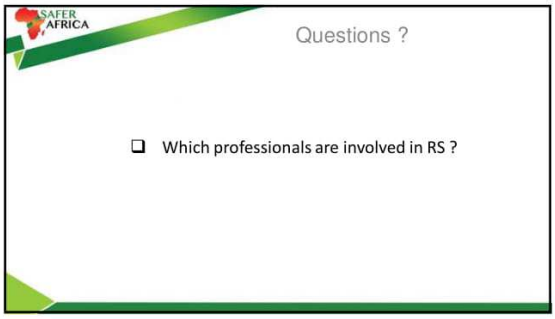
SAFER AFRICA
Vulnerable Road Users - children

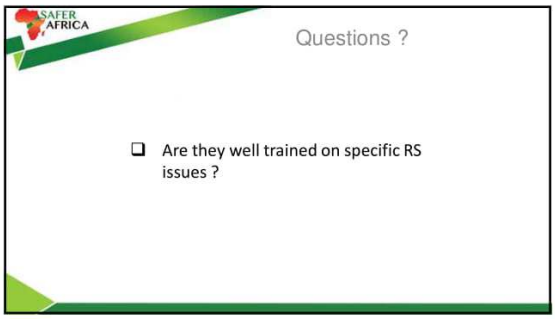
SAFER AFRICA
But also data on...
• Exposure
• Vehicles
• Infrastruture

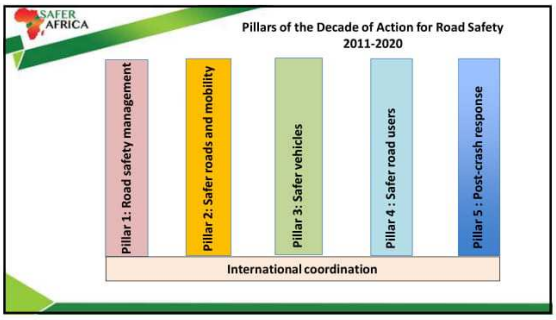
SAFER AFRICA
Thank you
Sandra Vieira Gomes
sandravieira@lnec.pt
+351 218443528

DIFFERENT PROFESSIONAL INVOLVED IN ROAD SAFETY ISSUES



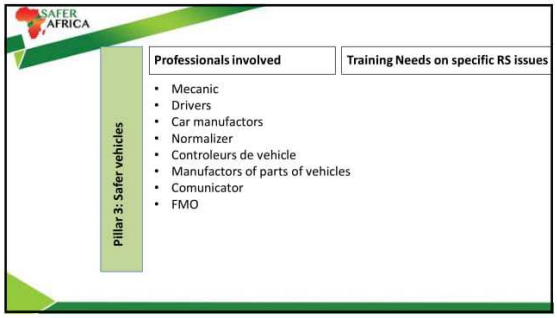


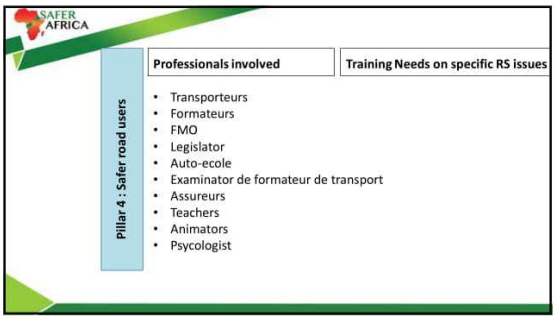



SAFER AFRICA
Pillars of the Decade of Action for Road Safety 2011-2020
Pillar 1: Road safety management
Pillar 2: Safer roads and mobility
Pillar 3: Safer vehicles
Pillar 4 : Safer road users
Pillar 5 : Post-crash response
International coordination

SAFER AFRICA
Pillar 1: Road safety management
Professionals involved
Training Needs on specific RS issues
Politics
Legislatiors
Normalizator
Administrator
FMO
Statistic
Jurist
Road Safety
Experts/advisors

SAFER AFRICA
Pillar 2: Safer roads and mobility
Professionals involved
Training Needs on specific RS issues
Transporter
Civil engineers
Police
Urbanist
Jurist
Safety experts


SAFER AFRICA
Pillar 3: Safer vehicles
Professionals involved
Training Needs on specific RS issues
Mecanic
Drivers
Car manufactors
Normalizer
Controleurs de vehicle
Manufactors of parts of vehicles
Comunicator
FMO


SAFER AFRICA
Pillar 4 : Safer road users
Professionals involved
Training Needs on specific RS issues
Transporteurs
Formateurs
FMO
Legislator
Auto-ecole
Examinator de formateur de transport
Assureurs
Teachers
Animators
Psycologist

SAFER AFRICA
Pillar 5 : Post-crash response
Professionals involved
Training Needs on specific RS issues
Medical
Assureurs
FMO
Secourist
Psycologist
Comunications
Jurist

PROFESSIONNALS / TOPIC	URBAN PLANNERS	ROAD ENGINEERS	SCHOOL TEACHERS	POLICE OFFICERS	DRIVER TEACHER	HEALTH PERSONNEL	PREVENTION OFFICERS	MAGISTRATES	POLITICS Maker	LEGISLATION	ADMINISTRATOR	STATITICIAN	NORMALYZATOR	EXPERT/ADVISOR	TRANSPORTER/DRIVER	JURIST	MECANIC	DRIVER	CAR MANUFACTOR	COMMUNICATOR	INSURANCES	ANIMATORS	PSYCOLOGIST	EXAMINATOR OF TRANSPORT TRAINER
Basic concepts of Traffic Safety	5	5	4	4	5	4	4	5	5	3	0	2	3	1	3	1	2	0	1	1	0	3	1	0
Road Safety Management and organization	3	2	3	3	2	3	4	1	5	2	0	0	1	2	0	0	0	0	0	0	0	2	0	0
Collection and analysis of crash data	0	1	1	4	0	4	2	0	2	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
Developing strategies and measures / evaluation	2	1	0	1	0	1	1	0	4	2	0	0	2	1	0	0	0	0	0	0	0	2	0	0
Road Safety Audit/inspection of infrastructure	2	4	0	2	0	0	2	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Road safety policies and plans	4	4	0	1	0	0	1	0	5	2	0	0	2	2	0	0	0	0	0	0	0	2	0	0
Economic models for policy impacts evaluation	0	0	1	0	0	0	1	0	4	1	0	2	1	2	0	0	0	0	0	0	0	1	0	0
Safety management of vehicles	0	0	0	3	4	0	2	0	3	0	0	0	0	2	2	0	1	0	0	0	0	0	0	0
Education / campaigning / drivers' licensing, ...	0	0	4	3	4	4	3	1	3	1	0	0	1	1	2	0	0	0	0	1	0	1	0	0
Developing traffic rules / enforcement / reaction to offenders	0	1	0	3	1	1	1	2	3	1	0	0	1	1	0	1	0	0	0	0	0	1	0	0
Incident management / insurance policy ...	0	0	0	4	0	3	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0
Psychology of the road user	1	1	4	2	4	2	2	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	1	0
Infrastructure design	3	4	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Homologation of products	0	0	0	0	0	0	1	0	3	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0
Training of professional drivers	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

DEFINITION OF LEARNING OUTCOMES

SAFER AFRICA

TRAIN-THE-TRAINER COURSE

Learning outcomes

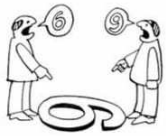
SANDRA VIEIRA GOMES
LNEC, PORTUGAL

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 724029

SAFER AFRICA

The 'normal' mistakes of experts

- Starting from his own point of view
- Reproduce his own 'education' (from the past)
- Trying to give 'everything', 'all the different aspects'
- Starting with the assumption that it's easy to understand
- ...



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Questions you have to ask yourself

- **Who** is my student?
  - His/her foreknowledge
  - His/her destination – what will he/she do in the future?
- **What** does he/she has to learn?
  - For which job tasks can he/she use this knowledge?
  - What can he/she do with the competences of the training?

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Writing Course Learning Outcomes

Learning outcomes describe what students will know and be able to do upon successful completion of a program or course.

Course learning outcomes are the basis for all learning activity and they communicate very specific expectations to students about what they will learn and what will be assessed.

The focus is on student achievement and how this will be demonstrated in assessment rather than generalised descriptions of teaching activity or learning experiences.

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Characteristics of course learning outcomes

- define the scope of the course
- use language that is comprehensible to students and prospective students before they undertake the course
- identify what 'typical' students will know and be able to do on successful completion of the course
- are measurable, realistic and achievable within the context and timeframe
- are inextricably linked to the learning outcomes of programs
- are demonstrated through assessment
- are supported through teaching and learning activity.

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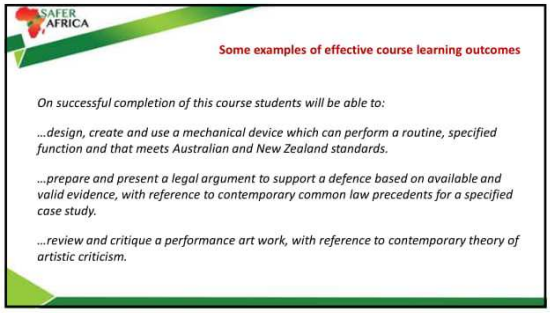
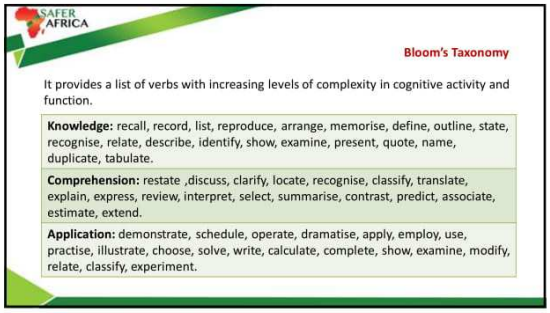
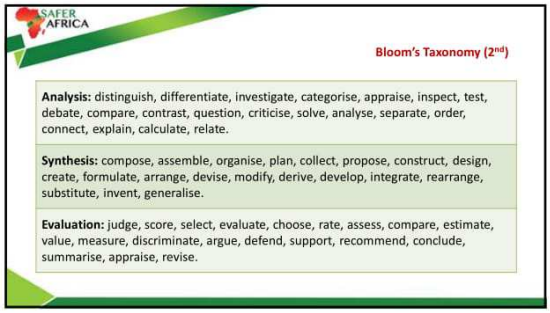
... and how to write course learning outcomes?

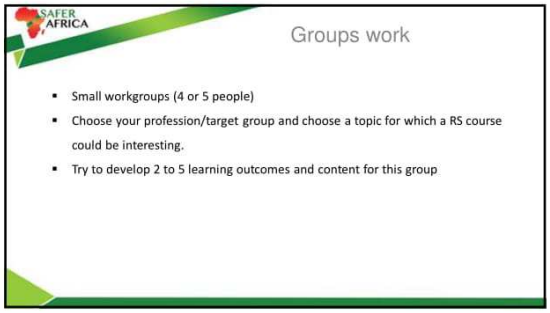
Effective course learning outcomes are written using the following structure:

Stem	a leading statement in the future tense, highlighting that the following actions are expected to be achieved by students by the end of the period of study
Active verb	indicating specifically what you want students to know, consider or do
Focus / Object	indicating the process, product or outcome of the action such as 'theories', 'research plan' and 'principles of ethical research'
Context/Condition/ Qualifier (optional)	indicating any conditions that may apply such as '...using the appropriate referencing system', '...as identified in ..', and '...relevant to...'

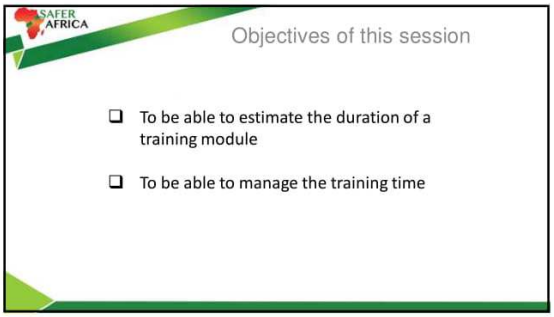

SAFER AFRICA
Some examples of effective course learning outcomes
On successful completion of this course students will be able to:
…design, create and use a mechanical device which can perform a routine, specified function and that meets Australian and New Zealand standards.
…prepare and present a legal argument to support a defence based on available and valid evidence, with reference to contemporary common law precedents for a specified case study.
…review and critique a performance art work, with reference to contemporary theory of artistic criticism.

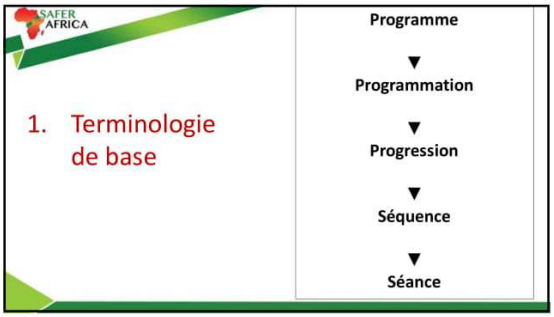

SAFER AFRICA
Bloom's Taxonomy
It provides a list of verbs with increasing levels of complexity in cognitive activity and function.
Knowledge: recall, record, list, reproduce, arrange, memorise, define, outline, state, recognise, relate, describe, identify, show, examine, present, quote, name, duplicate, tabulate.
Comprehension: restate ,discuss, clarify, locate, recognise, classify, translate, explain, express, review, interpret, select, summarise, contrast, predict, associate, estimate, extend.
Application: demonstrate, schedule, operate, dramatise, apply, employ, use, practise, illustrate, choose, solve, write, calculate, complete, show, examine, modify, relate, classify, experiment.

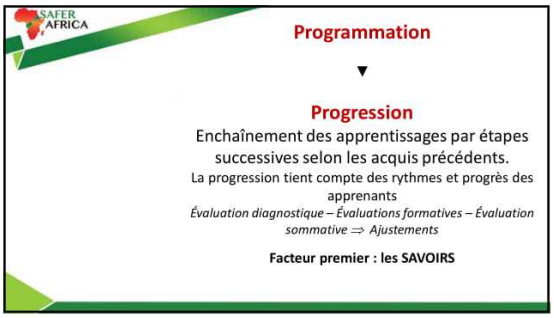

SAFER AFRICA
Bloom's Taxonomy (2nd)
Analysis: distinguish, differentiate, investigate, categorise, appraise, inspect, test, debate, compare, contrast, question, criticise, solve, analyse, separate, order, connect, explain, calculate, relate.
Synthesis: compose, assemble, organise, plan, collect, propose, construct, design, create, formulate, arrange, devise, modify, derive, develop, integrate, rearrange, substitute, invent, generalise.
Evaluation: judge, score, select, evaluate, choose, rate, assess, compare, estimate, value, measure, discriminate, argue, defend, support, recommend, conclude, summarise, appraise, revise.


SAFER AFRICA
Groups work
Small workgroups (4 or 5 people)
Choose your profession/target group and choose a topic for which a RS course could be interesting.
Try to develop 2 to 5 learning outcomes and content for this group

TRAINING TIME MANAGEMENT







Progression

▼

Séquence

Ensemble continu ou discontinu de séances, articulées entre-elles dans le temps et organisées autour d'une ou plusieurs activités en vue d'atteindre un objectif général.

Nécessite de concevoir son enseignement, non pas séance par séance, mais à plus long terme, de la situation de départ à l'évaluation, en passant par l'entraînement.

Unité de SENS, organisée autour de l'atteinte d'un objectif général explicité aux élèves

Séquence

▼

Séance

Période d'enseignement dont la durée est généralement d'environ 55 minutes.

Unité de TEMPS, organisée autour de l'atteinte d'un objectif spécifique.

Programme

Module 1	Module 2	---
Séquence 1 Séance 1 Séance 2 ---	 ---	 ---
Séquence 2		
---	---	---

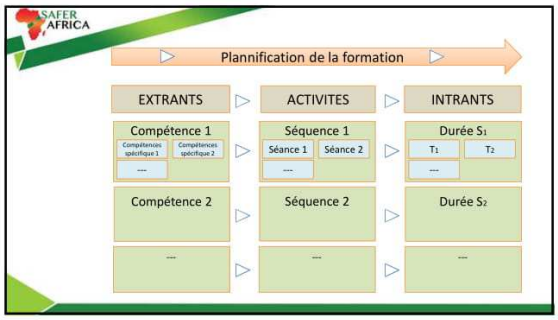
2. Estimation de la durée d'un module de formation

Quels sont les facteurs déterminants de la durée d'un module de formation ?

(Brainstorming)

Les déterminants de la durée d'un module de formation?

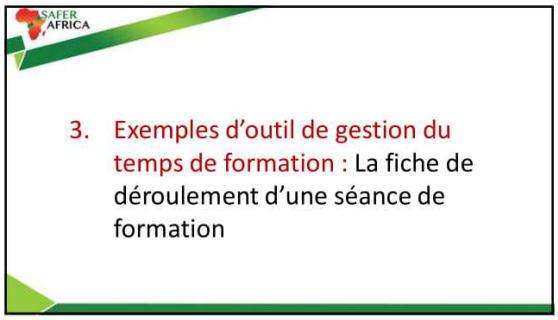
- Les compétences attendues en fin du module de formation,
- Les méthodes pédagogiques pour développer les compétences visées,
- Les outils et supports utilisés,
- Les modalités de la différenciation des parcours des apprenants
- Les évaluations formatives et sommatives à prévoir
- L'expérience du formateur
- ---


Plannification de la formation
EXTRANTS
ACTIVITES
INTRANTS
Compétence 1
Compétences spécifique 1
Compétences spécifique 2

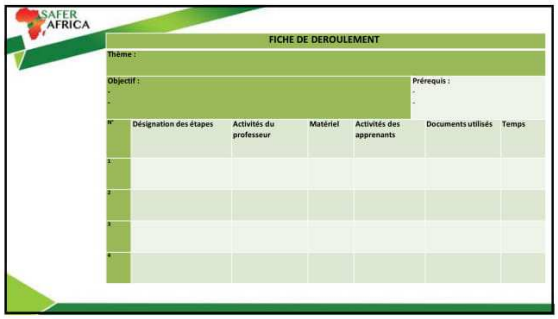
Séquence 1
Séance 1
Séance 2

Durée S1
T1
T2

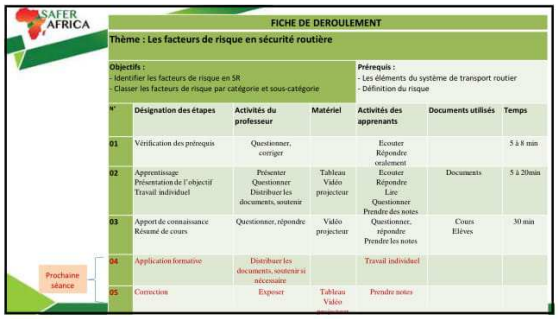
Compétence 2
Séquence 2
Durée S2


3. Exemples d'outil de gestion du temps de formation : La fiche de déroulement d'une séance de formation

Attention, il ne s'agit là que d'une proposition méthodologique, mais il serait peut être intéressant de l'essayer


FICHE DE DEROULEMENT
Thème :
Objectif :
Prérequis :
N°
Désignation des étapes
Activités du professeur
Matériel
Activités des apprenants
Documents utilisés
Temps

Application


FICHE DE DEROULEMENT
Thème : Les facteurs de risque en sécurité routière
Objectifs :
- Identifier les facteurs de risque en SR
- Classer les facteurs de risque par catégorie et sous-catégorie
Prérequis :
- Les éléments du système de transport routier
- Définition du risque
N°
Désignation des étapes
Activités du professeur
Matériel
Activités des apprenants
Documents utilisés
Temps
01
Vérification des prérequis
Questionner, corriger
Ecouter
Répondre oralement
5 à 8 min
02
Apprentissage
Présentation de l'objectif
Travail individuel
Présenter
Questionner
Distribuer les documents, soutenir
Tableau
Vidéo projecteur
Ecouter
Répondre
Lire
Questionner
Prendre des notes
Documents
5 à 20min
03
Apport de connaissance
Résumé de cours
Questionner, répondre
Vidéo projecteur
Questionner, répondre
Prendre les notes
Cours
Elèves
30 min
04
Application formative
Distribuer les documents, soutenir si nécessaire
Travail individuel
Prochaine séance
05
Correction
Exposer
Tableau
Vidéo
Prendre notes

FROM LEARNING OUTCOMES TO CONTENT

SAFER AFRICA

TRAIN-THE-TRAINER COURSE

Defining content

SANDRA VIEIRA GOMES
LNEC, PORTUGAL

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 724029

SAFER AFRICA

... as a reminder

Learning outcomes describe what students will know and be able to do upon successful completion of a program or course.

Course learning outcomes are the basis for all learning activity and they communicate very specific expectations to students about what they will learn and what will be assessed.

The focus is on student achievement and how this will be demonstrated in assessment rather than generalised descriptions of teaching activity or learning experiences.

SAFER AFRICA

So we have identified the learning outcomes...

How do we define content from this?

SAFER AFRICA

Let take as an example the training on how to design a roundabout

On successful completion of this course students will be able to:

...understand the specific standards related to the roundabout design

...define the minimum requirements for the design of the roundabout according to the expected road users and traffic flow,

..design the roundabout according to the input data and the design standards.

SAFER AFRICA

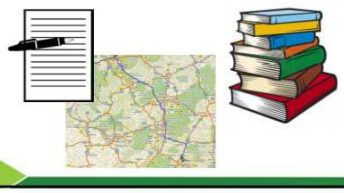
What kind of elements/information we must provide?

- ❑ Background information
  - different kinds of intersections and the advantages and disadvantages of roundabouts use
  - Diferent kinds of roundabouts, and how to choose them
- ❑ Legislation / design standarts

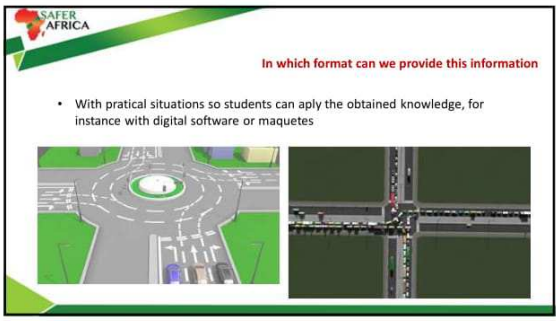
SAFER AFRICA

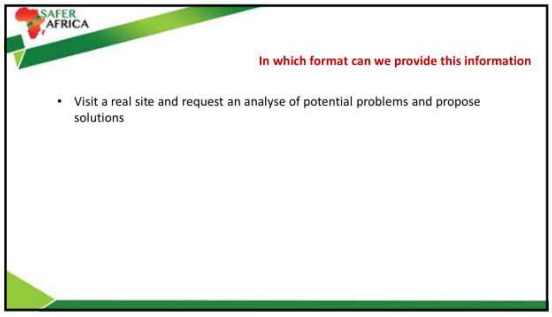
In which format can we provide this information

- Documents/readings



SAFER AFRICA
In which format can we provide this information
• Videos

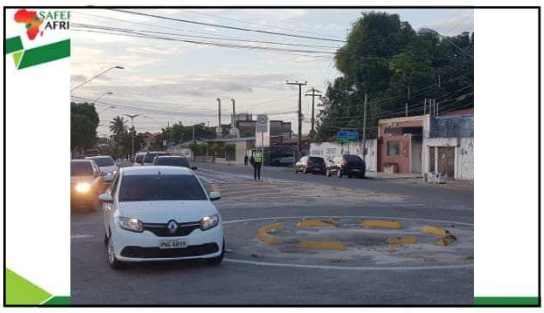

SAFER AFRICA
In which format can we provide this information
• With pratical situations so students can aply the obtained knowledge, for instance with digital software or maquetes


SAFER AFRICA
In which format can we provide this information
• Visit a real site and request an analyse of potential problems and propose solutions

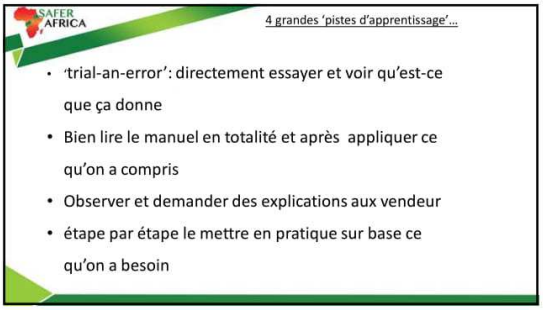
SAFER AFRIC

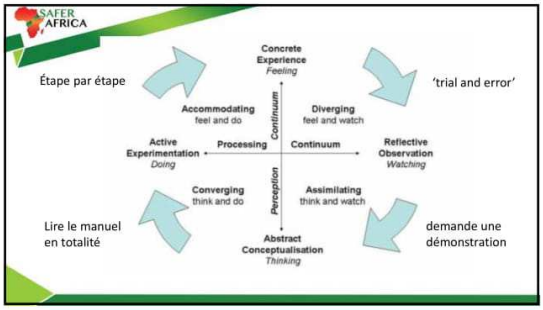
SAFE AFRI

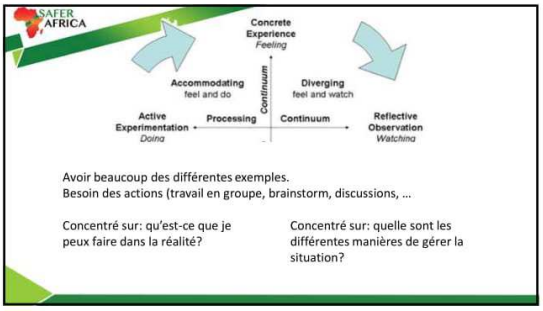
SAFE AFRI

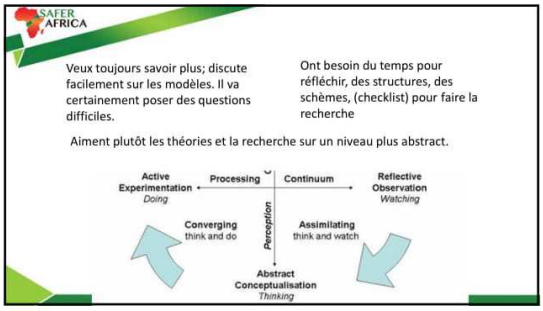


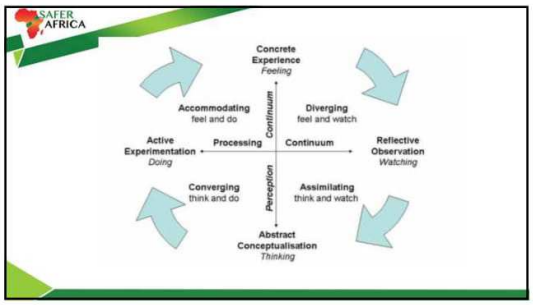
LEARNING PROCESSES IN ADULTS

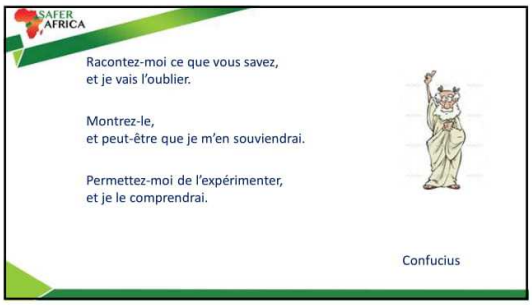


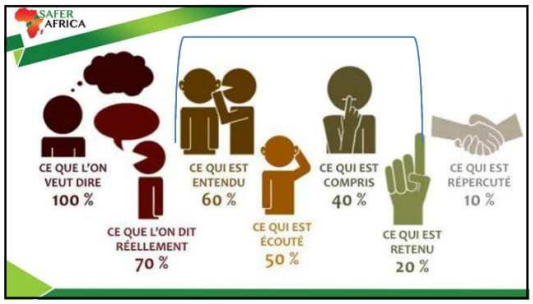




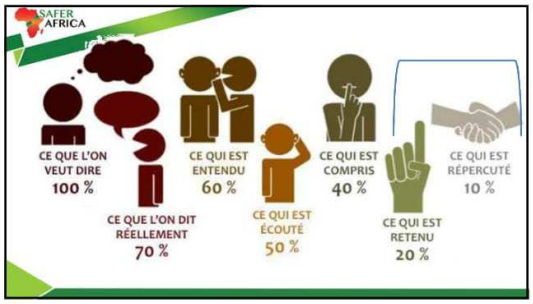



SAFER AFRICA
Concrete Experience
Feeling
Accommodating
feel and do
Diverging
feel and watch
Continuum
Active Experimentation
Doing
Processing
Continuum
Reflective Observation
Watching
Converging
think and do
Assimilating
think and watch
Perception
Abstract Conceptualisation
Thinking


SAFER AFRICA
Racontez-moi ce que vous savez,
et je vais l'oublier.
Montrez-le,
et peut-être que je m'en souviendrai.
Permettez-moi de l'expérimenter,
et je le comprendrai.
Confucius


SAFER AFRICA
CE QUE L'ON VEUT DIRE 100 %
CE QUE L'ON DIT RÉELLEMENT 70 %
CE QUI EST ENTENDU 60 %
CE QUI EST ÉCOUTÉ 50 %
CE QUI EST COMPRIS 40 %
CE QUI EST RETENU 20 %
CE QUI EST RÉPERCUTÉ 10 %

SAFER AFRICA
"bias de confirmation" (Festinger)
Nos propres idées…
• Sélectionnent et interprètent l'info
• Guident notre recherche
• Guident aussi notre mémoire.
IT'S NOT DENIAL
I'M JUST VERY SELECTIVE ABOUT THE REALITY I ACCEPT


SAFER AFRICA
CE QUE L'ON VEUT DIRE 100 %
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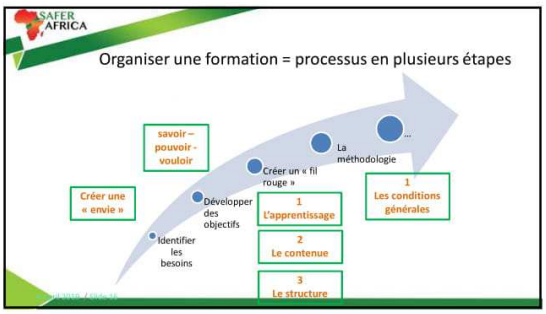
CE QUI EST ENTENDU 60 %
CE QUI EST ÉCOUTÉ 50 %
CE QUI EST COMPRIS 40 %
CE QUI EST RETENU 20 %
CE QUI EST RÉPERCUTÉ 10 %

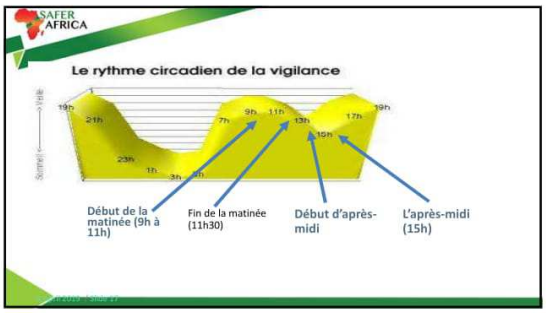
SAFER AFRICA
BLEU
JAUNE
ROUGE
NOIR
ROUGE
BLEU
VERT
ORANGE

NOIR
ROUGE
VERT
JAUNE
BLEU
VERT
ORANGE
BLEU

DES 'SOLUTIONS'
Avoir le courage de laisser tomber certaines choses.
Le règle 20/80 aussi en formation
Un « sujet » par mi-journée / découper
Rester toujours en fonction du but final
Ne pas surestimer les participants.

La construction d'une session de formation
Eye-catcher – création d'un besoin, susciter leur intérêt
Bien connaître les points les plus importants / les idées de base
Alterner la théorie et la pratique
Faire référence à la structure
L'interaction est terriblement importante!
Répéter, répéter, répéter,...
le rythme du jour

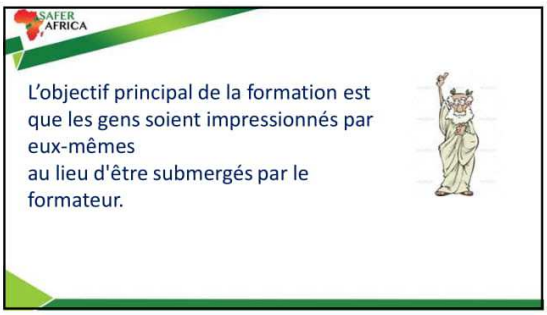

Organiser une formation = processus en plusieurs étapes
savoir – pouvoir - vouloir
Créer une « envie »
Identifier les besoins
Développer des objectifs
Créer un « fil rouge »
La méthodologie
...
1 L'apprentissage
2 Le contenue
3 Le structure
1 Les conditions générales


Le rythme circadien de la vigilance
Début de la matinée (9h à 11h)
Fin de la matinée (11h30)
Début d'après-midi
L'après-midi (15h)

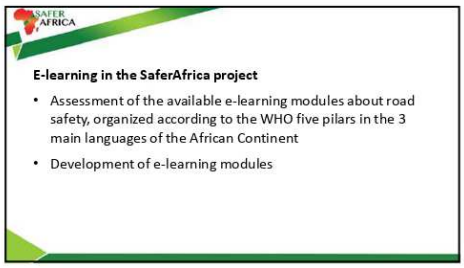
Les conséquences du rythme de la journée
Début de la matinée (9h à 11h)
« le moment suprême » pour travailler sur les nouveautés.
Théorie
Comprendre des choses
...
Fin de la matinée (11h30)
Le résumé
La conclusion
Le mettre en évidence
...
Début d'après-midi
Réveiller les gens, surtout après un lunch un peu lourd et si le soleil est là...
Pas de vidéos!
L'après-midi (15h)
Le moment le moins attentif!
Des choses qui demandent moins d'énergie
Des choses très pratiques

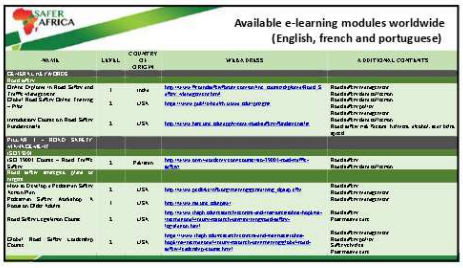
SAFER AFRICA
On peut emmener les chameaux vers la rivière,
mais on ne peut pas les obliger à boire

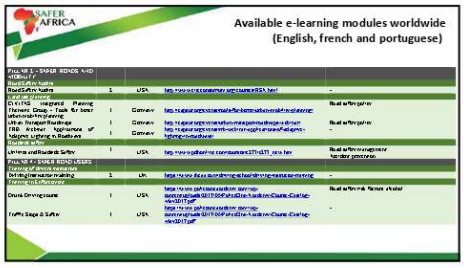
SAFER AFRICA
Ce que les gens observent de vous comme formateur / formatrice
La persévérance
Travail dur
Envie de perfection
échouer
La désillusion
De la discipline

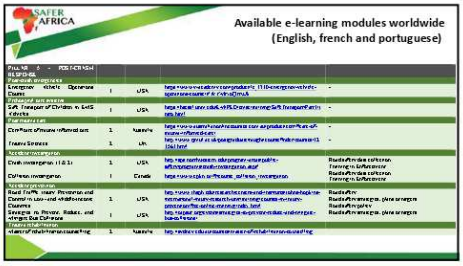

SAFER AFRICA
L'objectif principal de la formation est que les gens soient impressionnés par eux-mêmes
au lieu d'être submergés par le formateur.

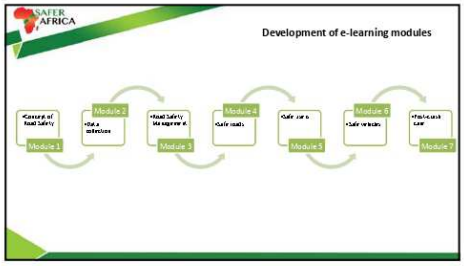
WORKING WITH E-LEARNING MODULES











Module 1 Concepts of Road safety	(1) Fall about...
	(2) Road Safety approach
	(3) Risk factors
	(4) Model of crash analysis
Module 2 Data collection	(5) RS data, collection and analysis ratio
	(6) Road crash data analysis
	(7) safety performance indicators
	(8) data analysis and policy making
Module 3 Road safety Management	(9) Country Management
	(10) Developing strategies
	(11) Definition of targets
	(12) Financing
Module 4 Safe Roads	(13) Road lifecycle
	(14) Driving tasks related to the road environment
	(15) Impact of safe system principles
	(16) Crash contributing factors in road infrastructure
	(17) Methodologies to assess the effects of interventions
Module 5 Safe users	(18) Introduction
	(19) Vulnerability of road users
	(20) Education
	(21) Enforcement
Module 6 Safe vehicles	(22) Active safety
	(23) Passive safety
	(24) Driver licensing stations
	(25) Technical control & inspection
Module 7 Post-crash care	(26) Global vision
	(27) Medical care and rehabilitation
	(28) Mental health care
	(29) PCA as an integrated approach
	(30) Socio-economic aspects of PCA

[redacted]

SAFER AFRICA

coursera

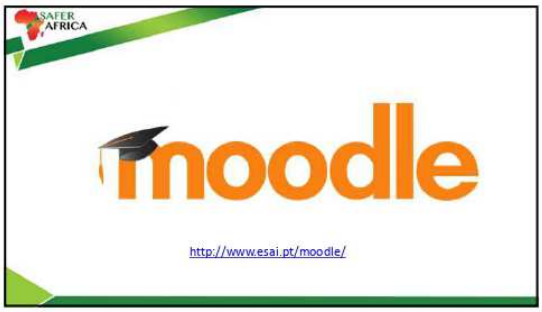
https://www.coursera.org

https://www.coursera.org/learn/intro-self-driving-cars/home/welcome

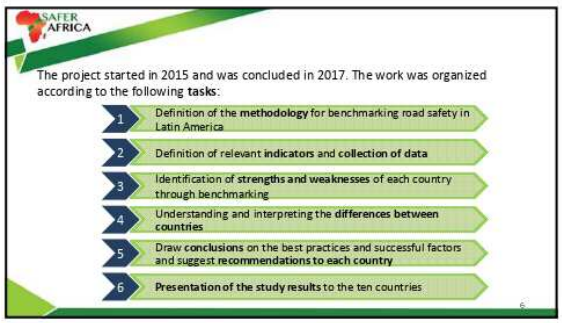
SAFER AFRICA

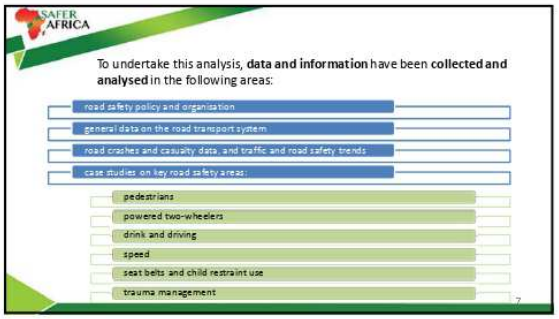
moodle

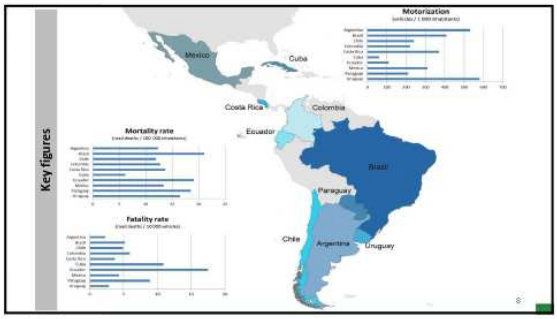
http://www.esai.pt/moodle/

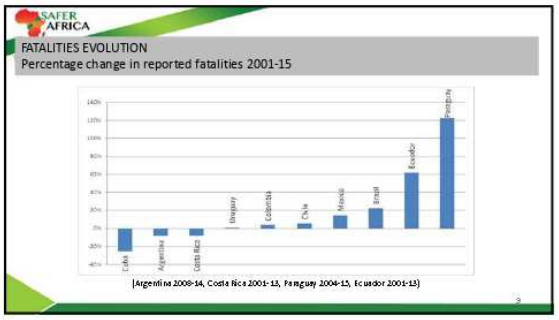


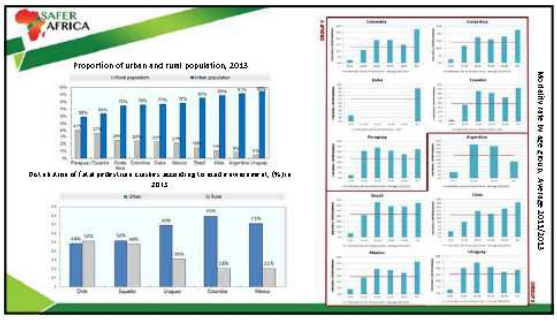
ADDITIONAL MATERIALS

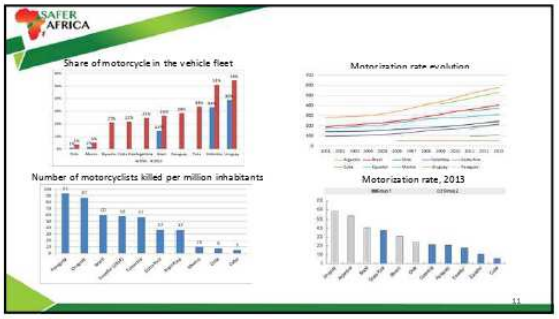



SAFER AFRICA
To undertake this analysis, data and information have been collected and analysed in the following areas:
road safety policy and organisation
general data on the road transport system
road crashes and casualty data, and traffic and road safety trends
case studies on key road safety areas:
pedestrians
powered two-wheelers
drink and driving
speed
seat belts and child restraint use
trauma management


Key figures
Motorization
Mexico
Cuba
Costa Rica
Colombia
Ecuador
Brazil
Paraguay
Chile
Argentina
Uruguay
Mortality rate
Fatality rate


SAFER AFRICA
FATALITIES EVOLUTION
Percentage change in reported fatalities 2001-15
Cuba
Argentina
Costa Rica
Uruguay
Colombia
Chile
Mexico
Brazil
Ecuador
Paraguay
(Argentina 2008-14, Costa Rica 2001-13, Paraguay 2004-13, Ecuador 2001-13)

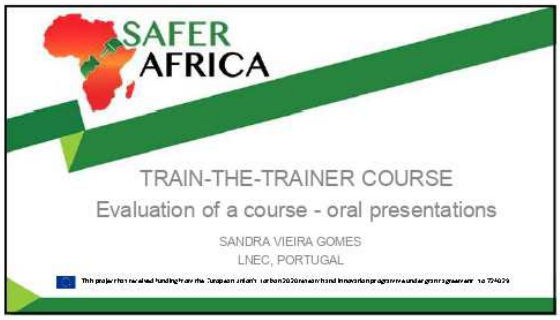

SAFER AFRICA
Proportion of urban and rural population, 2013
Motorization rate in Latin America 2001/2013

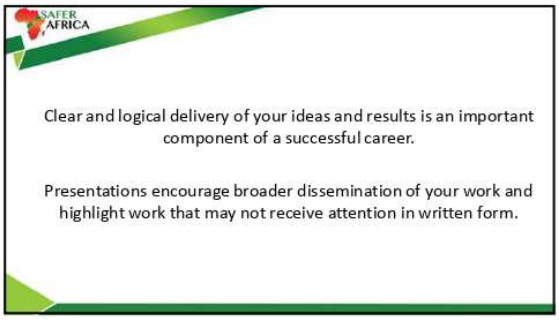

SAFER AFRICA
Share of motorcycle in the vehicle fleet
Motorization rate evolution
Number of motorcyclists killed per million inhabitants
Motorization rate, 2013

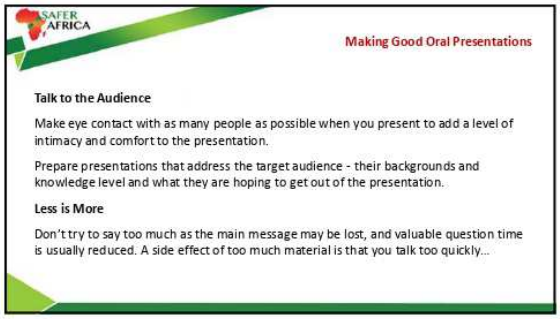
SAFER
Main Conclusions
General recommendations are complemented with specific recommendations per country.
Road safety is a major issue in Latin America and substantial actions are needed to reduce the road safety toll.
Unless there is strong policy, investment and leadership, overall fatalities will deteriorate across Latin America over the next decade.
Data is a critical issue for policy making and we have identified the areas that need improvement for each one of these countries.
OISEVI may have an important role in overcoming the data needs of Latin America countries.

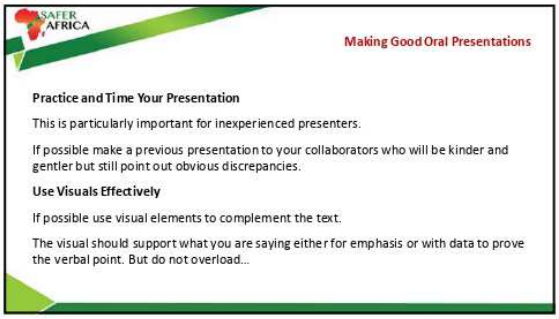
SAFER AFRICA
Additional materials
LINKS
http://www.saferafrica.eu/
http://dialogue.africanroadsafetyobservatory.org/user/auth/login
https://www.who.int/gho/road_safety/en/
https://www.itf-oecd.org/
https://www.bloomberg.org/
https://www.paho.org/
https://www.piarc.org/fr/
https://www.irf.global/
https://www.itf-oecd.org/IRTAD

EVALUATION OF A COURSE









ABBREVIATIONS

EC	European Commission
ENSTP	École Nationale Supérieure des Travaux Public
EU	European Union
RS	Road Safety
TTT-course	Train-The-Trainer course