

# Extra SWOT analysis Secondary school pupils and teachers

EMR region

Analyses were done in February-April 2022, extra questionnaires were taken during workshops for promotion of the FunForLab project

Part A: SWOT analysis of current MLT situation (education/profession)

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- Most pupils consider the MLT training to be relatively scientific and are not always interested in this aspect, but the FFL project presentation increased their curiosity.
- Pupils do not perceive the MLT job as being boring, repetitive, or dangerous
- Pupils and teachers find MLT training to be challenging but feasible and believe that there are good and diverse job opportunities.
- For the German EMR: Students get a salary during education time.
- Pupils at an MLT-specific MBO educational program (Dutch Region) have already made a choice for the profession.
- The FFL promotion video allowed the students to see the multitude of tasks related to the profession
- Secondary school teachers had a good idea of what the profession was like
- Secondary school teachers were not familiar with the content of the MLT programs but were interested in having some information

- Most pupils never heard of the job of MLT before the FFL project promotional video was shown
- Most teachers know about the MLT job and education, but do not promote it to their pupils
- Most pupils have already made a study choice for higher education, but most of them do not plan to study MLT (rather more chemistry-oriented sciences and Biomedical sciences)
- Technical courses in secondary schools are totally not-directed towards MLT profession.
- Most pupils have very less knowledge about MLT training and profession in the EMR: They don't know about educational regulations and conditions and the differences between education in NL, BE and G.

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- Some pupils that did not think of studying MLT before the introduction to the project, are now considering this option
- Pupils with STEM background in secondary school have more affinity with scientific programs such as MLT, which makes them a good target group for promotion of the MLT job and education
- Teachers interviewed knew the job well and were motivated to transmit it Teachers had a good idea of the techniques used, the methods, the function... (according to a given definition: "A paramedical professional who analyzes samples from patients in order to obtain information about their health condition". )
- Pupils at an MLT-specific MBO education program could benefit from EMR cooperation in MLT-education, as they are also being prepared for a job in MLT.
- If pandemic will be lasting (or develop as endemia) the use of digital media (and the FunForLab game) will inevitably be an important first step to get knowledge about the MLT profession.

- Few pupils are specifically interested in studying the MLT program
- The majority of pupils indicate not to be well prepared for studying MLT <-> teachers either believe pupils are well prepared (those in science-tech programs) or not well prepared (not enough STEM in secondary school)
- Pupils with different educational backgrounds in secondary school (e.g. course hours for chemistry, biology, mathematics, physics) are better/less well prepared for MLT education and profession (perhaps some need more information and instructions than what is provided by the serious game, more basic level information)

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Part 2: SWOT analysis of FUNFORLAB game

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- The concept of the FFL game is appealing to secondary school pupils, to get to know more about the MLT job
- Teachers are eager to implement the game in their classes
- Most of the students liked the idea of challenging themselves through a serious game
- A majority of pupils assume that MLT professionals have to work with high tech automatons, so the game will be a first step to do that kind of work digitally.

- The difficulty of the games should not prevent students from taking advantage of the benefits of serious games (it will be important to pay attention to the level and fun aspects of the game)
- Most pupils do not know the concept of a serious game
- The diversity in secondary school programs is a challenge to make the game playable for all pupils/

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- Pupils and teachers already get acquainted with several digital learning platforms in secondary school (digital learning is familiar to them; e.g. Kahoot, Socrative, Columbus, etc.)
- Many pupils are willing to use a serious game as FFL to find out which job would fit to their personal abilities and skills.
- Most pupils feel that a balanced mix between challenges and information should be the game backbone.
- Most pupils want levels in difficulty and rewards. Suggestions were that the game would even be coupled to course credits.
- Pupils suggested to have the possibility to get a customizable avatar that could also be developed and evolved during the game and different challenges.

- The game needs to contain a good story and nice visuals, otherwise it is not appealing to pupils so they won't play the game
- Depending on the educational background in secondary school (e.g. course hours for chemistry, biology, mathematics, physics) pupils are better/less well prepared for MLT, so the game should take the differences between these groups into account (level of difficulty, more/less instructive and informative, more/less pedagogical support)
- The game should not be to 'childish' in its approach to the pupil. Otherwise pupils will feel the game does not take them seriously.
- If pandemic will be lasting people could be tired of digital events/games and long for more face-to-face information. Then they will not feel inclined to play digital serious games.

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