STEMfluence / Amper Slim: Role Models on Social Media Encourage STEM-carriers

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***Abstract*—**Although many efforts are conducted to encourage youngsters to opt for a study and/or profession in STEM (Science, Technology, Engineering, Mathematics), many youngsters, especially minorities and women, keep underrepresented in this job sector. Former initiatives were not always decisive in youngsters decision to choose a STEM-carrier. One of the reasons might be that these initiatives are less adapted to important groups with large potential such as minorities. Also, certain activities might have a rather 'masculine focus' (e.g. the use of fighting robots, spectacular games) and therefore were less attractive to female pupils. Finally, a scholastic approach and exclusive stereotyping might interfere with youngsters interests when choosing a future job.

Many factors influence youngsters (STEM)study/carrier-choice: interest in the discipline, self-efficacy, identification with certain professions, extrinsic motivation (e.g. job certainty, status). Some youngsters drop out of a STEM-study because of the negative image of the STEM-workfield. Apart from these rational motivational aspects, more emotional reasons such as peers and the social network, play an important role in their decision-making process. A large part of the social live of digital natives takes place online. They use the internet as main source to gain information for their future studies. Therefore, actions to encourage STEM-carriers should focus on the own living environment of youngsters using channels that are frequently used, such as social media.

In real life as well as on the internet, youngsters are subject to social norms that influence their decision behavior. By observing others they form an image of what is 'normal'. Normal means what the others do or what a role model does. Role models are therefore crucial for the personal development of youngsters, including their carrier choice. Role models might be others that are representative for themselves (close role models) or others to look up to (distant role models). Success stories of influences and examples from the business world might help youngsters in making their carrier choice.

To tackle the STEM-carrier deficit with guidelines derived from above outlined overview, the one-year project STEMfluence (2018) unites all Flemish universities (among which ECSITE-member KU Leuven) and universities of applied sciences to encourage last graders in secondary education to opt for a STEM-carrier. A co-creation research with 10 representative Flemish last grade high school students will be presented to reveal how role models could encourage youngsters, especially women and minorities, to consider a STEM-carrier by putting relevant content on social media. Together with business partners and a media partner specialized in viral and inclusive communication for youngsters, STEMfluence will deploy role models on social media to bridge the gap between youngsters and the 'unreachable' STEM-jobs by introducing to them what STEM really means, engage their interest in the field of work, identify them with STEM-profession and making a motivated STEM-study choice.

***Keywords*—STEM, role models, social media, minorities, women**

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