Abstract

The Finnish Education Evaluation Centre (FINEEC) carried out an evaluation of entrepreneurship in vocational education and training and in higher education institutions in 2017–2018. The purpose of the evaluation was to generate knowledge and develop activities. The assessment questions were:

- How do students feel they have learned about entrepreneurship during their current studies?
- How is entrepreneurship taught?
- How does the operational culture of the vocational education provider or higher education institution support the learning of entrepreneurship?
- Which factors promote learning entrepreneurship?

The results of the evaluation are composed of three kinds of data: student questionnaires, thematic group interviews and data collected from the Yhdessä yrittämään! events. A total of 13,088 students and candidates responded to the student questionnaires: 7,818 vocational upper secondary students from 78 education providers, 2,810 people taking a competence-based vocational qualification from 84 different providers, 1,464 students from 24 and 996 university students from 14 universities. A total of 272 students, staff members and management representatives participated in the thematic group interviews. Around 200 people participated in the Yhdessä yrittämään! events.

Nearly all higher education institutions and 72 % of vocational education providers organised entrepreneurship studies. Around one third of the university students and vocational students had completed entrepreneurship studies during their current study programme. Around half of the students at universities of applied sciences had completed entrepreneurship studies. Students considered entrepreneurship studies to be important for functioning as an entrepreneur.

The most common ways of teaching entrepreneurship were group and project work, independent tasks and, in higher education, lectures. Higher education students had cooperated the most with businesses and students from other fields as part of their entrepreneurship studies. In vocational
education and training, there was little cooperation in entrepreneurship studies with businesses or students from other degree programmes, fields of study or levels of education.

Students in both vocational education and training and higher education institutions reported that there is a positive attitude towards entrepreneurship. The entrepreneurial operating culture of the education providers and higher education institutions boosted students’ experience of learning entrepreneurship. Timetables did not always enable the selection of diverse entrepreneurship studies. In higher education institutions, the challenge was to fit entrepreneurship studies into degree programmes and within the given time frame for completion of the degree.

In both higher education institutions and vocational education and training, students considered diverse teaching methods, cooperation with businesses and hearing entrepreneurs’ stories as the best ways to learn about entrepreneurship. Students also valued authentic entrepreneurship experiences, such as student company projects or team entrepreneurship. Participation in these forms of learning through practical business activities was, on the other hand, very low in both higher education institutions and vocational education and training. Students were critical of entrepreneurship studies provided as online studies. There are challenges relating to the verbalisation of entrepreneurship competency in vocational education and training and higher education.

The majority of students in vocational education and training felt that they had learned little in terms of the information needed to function as an entrepreneur. The study experience of students who had completed entrepreneurship studies was more positive than that of students who had not. Since those students who had not participated in entrepreneurship studies still stated that they had learned information needed to function as an entrepreneur during their studies, it can be assumed that they learned it as part of their other studies, for example through vocational qualification components. For most students who had completed entrepreneurship studies, enthusiasm for engaging in business activities had either remained the same or grown during their studies. Vocational education and training students were not able to evaluate how much they had learned about different entrepreneurial characteristics during their current studies.

Higher education students, in contrast, felt that they had learned about entrepreneurial characteristics and attitude during their higher education studies. Also, the students’ enthusiasm to get involved in business activities had increased through participating in entrepreneurship studies. The entrepreneurial attitude of the staff and their approach towards entrepreneurship also had a positive influence on learning about entrepreneurial attributes and entrepreneurial attitude.

Based on the evaluation, the recommendations for development are as follows:

- Educational organisations should develop methods through which students interested in entrepreneurship and entrepreneurship studies are identified and such students can find entrepreneurship studies. More emphasis should be put into raising awareness of entrepreneurship studies.
- High quality and inspiring teaching is achieved through carrying out the entrepreneurship studies in cooperation with entrepreneurs, using diverse and multi-method approaches, combining different fields of study, and including authentic entrepreneurship experiences.
• Teachers should encourage students to participate in forms of learning that involve practical business activities, such as team entrepreneurship and student company projects.

• Teachers should pay attention to the verbalisation of entrepreneurship skills and competencies.

• Attention should be paid to the challenges relating to studies that combine different fields of study and actors. For example, differences in timetables and limitations set by curricula should be recognised and dealt with.

• Education providers and higher education institutions should invest in creating an entrepreneurial operating culture, as this increases students’ entrepreneurship and entrepreneurial ways of operating.

• Business cooperation based on personal partnerships should be developed into educational organisation partnerships. Operating models and structures for facilitating and monitoring cooperation should be developed.

• Educational organisations should actively inform their graduates of the services and facilities available that support entrepreneurship.

• Attention should be paid to the monitoring and assessment of entrepreneurship activities. The figures used to assess the state of entrepreneurship in educational organisations should be diverse and should support economically sustainable business activities. Quantitative and qualitative goals should be set for business cooperation, feedback on cooperation should be collected, and progress towards the goals should be monitored.

**Keywords:** entrepreneurship teaching, entrepreneurship education, vocational education and training, higher education, assessment, evaluation.