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Kiikeri, P., Uusiautti, S., & Purtilo-Nieminen, S. (2023). Finnish vocational education and training (VET) students' perceptions of the joy of studying in an online learning environment. International journal of adolescence and youth, 28(1). https://doi.org/10.1080/02673843.2023.2252893
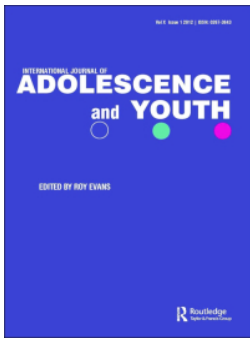
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Published online: 13 Sep 2023.

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Finnish vocational education and training (VET) students' perceptions of the joy of studying in an online learning environment

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ABSTRACT

We examined the perceptions of students in Finnish vocational education and training (VET) institutions about the joy of studying in online learning environments. The data consisted of 290 students' answers to a survey and a thematic interview with eight students. The phenomenographic analysis revealed students' experiences of joy in practical learning using digital programmes, independent learning online, collaborative learning online, and working life-oriented online learning. Students experienced the joy of studying when the teacher was positive, supportive, and interested in the subject being taught and treated all students equally. Some students experienced the joy of studying when they could study with others, while others experienced joy alone, regardless of time and place. The research contributed a profound understanding of the joy of learning in different online learning environments, which helps develop teaching and learning in VET in a student-centred manner

Introduction

In this article, we explored the joy of studying in online studies for vocational education and training (VET) students. Sajaniemi (2023) described joy as a sense of well-being. According to Sajaniemi (2023), people look for positive experiences in their environment that support activity and development. Positive emotions serve as markers of flourishing or optimal well-being. In addition, positive emotions feed psychological resilience and increase students' resilience. Experiences of positive emotions can also build psychological resilience over time, not just reflect it. Positive emotions and the expanded thinking they generate also affect each other, which leads to a noticeable increase in emotional well-being over time (Fredrickson, 2001).

Pedagogical solutions usually focus on creating a positive atmosphere in the classroom, but the atmosphere in online studies is also equally important (Iamsen et al., 2022; Munandar et al., 2022). According to Lou and Xu (2022), positive education online is becoming an irreversible trend that further promotes the science and sustainability of positive education.

The goal of this research is to find different ways of working and methods that can increase the joy of learning in online courses in VET. When well-being and a positive emotional state increase, they radiate to students' learning, improving their learning results because their interest in gaining new education and engaging in learning increase (Eades et al., 2013). A positive emotional state makes students feel safe, which expands their thinking and action patterns. Pride as a positive emotion increases students' willingness to share achievements with other students and strive for

even greater achievements. Students are not afraid of failure and thus enjoy learning and are more motivated to learn (Eades et al., 2013; Fredrickson, 2001). In this way, students are also more flexible and open to new information and different perspectives, which also promotes creativity. Students' problem-solving abilities and learning improve. In addition, students are also more open to feedback and advice, in which case, a positive emotional state also strengthens their ability to receive feedback (Lipponen, 2015; Ojanen, 2014).

Negative emotions and distractions can be balanced consciously and effectively by focusing on the positive (Eades et al., 2013). Happy students learn effectively (Fredrickson, 2001). Ideally, focusing on joy in the classroom extends happiness to educational institutions (Eades et al., 2013).

In Finland, following basic education, a student can choose whether to complete upper secondary school or VET. However, VET students can be both young people who have completed basic education and those without a vocation-oriented degree, as well as adults already working. The context of VET is interesting because of the special nature of practice-oriented education. The development of online education in VET has its special features in pedagogical solutions because students should learn work skills needed in practice, such as in nursing or construction, that cannot be learned without concrete, hands-on practice (Abdull Mutalib et al., 2022). While the aspect of positive emotions in basic education has been quite widely studied (Eades et al., 2013), we know little about VET students' joy of learning in online learning environments. As the development of digitalized education expands, the objective of this research is also to pay attention to how to ensure student well-being in various learning environments in the future.

Theoretical background

In the educational sciences, there is increasing research on positive emotions, including joy, as prerequisites for learning and comprehensive well-being (Leskisenoja & Uusiautti, 2017; Rantala & Määttä, 2012). However, joy is an experience that is difficult, almost impossible, to describe unambiguously (Kassara, 2017.) The joy of studying is usually related to students' own studies, but Rantala (2005) defined the joy of learning as being related to many different disciplines and research areas. The joy of learning is an umbrella concept that can be used to approach all kinds of emotions, feelings, and sensations that occur in school, such as feeling good grades or success in learning tasks. The joy of learning can be reflected through several adjacent concepts and theories of learning (Rantala & Määttä, 2012). The joy of studying, which we use here, is a narrow concept that focuses on the positive emotions that emerge in learning situations, and not on learning per se.

As there are numerous factors that can cause positive emotions in online learning environments, we approached them from the perspective of well-being. The theoretical background of this study is based on Seligman's (2011) PERMA theory. According to Seligman (2011), well-being is based on five elements: positive emotions (P), engagement (E), relationships (R), meaning (M), and accomplishment (A). All of these elements meet the following conditions: the element promotes well-being, people pursue the element of self-worth for its own sake and not to achieve other components of well-being with it, and the element can be independently defined and measured (Seligman, 2011).

Positive emotions focus on students' positive emotions, such as feelings of joy and happiness, and motivation during online learning (Seligman, 2011). Zembylas (2008) stated that positive emotions include joy, enthusiasm, and excitement about the flexibility of online learning; pride and satisfaction from meeting course requirements; and surprise and excitement about the emotional nature of online communication. Engagement emphasizes a sense of commitment and immersion in learning activities (Seligman, 2011), often compared to a flow state (Csíkszentmihályi, 2008). A student enters the flow state when their own abilities and demands are in line with the given task. Entering a flow state develops the skills and perseverance to work on challenging tasks (Jackson & Csíkszentmihályi, 2000; Seligman, 2011).

Relationships make students feel socially supported, loved, and valued by others (Seligman, 2011). In the socioconstructivist model of digital learning, interaction and dialogue are key features

of learning (Smith, 2022). According to Sajaniemi (2023), interaction with other people is one of the most central and rewarding sources of pleasure. Positive learning combined with online learning can create learning communities through social media or metauniverse and build good communication and learning relationships between students (Lou & Xu, 2022). Alzain's (2019) research results suggest that supporting cooperative online learning based on the role of social networks has a positive effect on facilitating student-to-student and student-to-teacher interactions.

The fourth element of meaning refers to the understanding of purpose and a sense of worth in one's life (Seligman, 2011). Finding meaning in learning can happen through positive experiences (Seligman, 2011), and in an online course, technology can be used to create meaning (Lou & Xu, 2022). Lou and Xu (2022) highlighted the constructivist digital learning of online learning, in which a teacher plays a more facilitative role.

Accomplishment is the feeling of working towards goals and achieving them (Seligman, 2011). Particularly in studying, it is crucial to students' well-being to be able to advance in studies, complete smaller and bigger tasks, and gain a positive sense of themselves as learners and members of the education community (Katajisto et al., 2022).

Method

Purpose of research and research approach

The objective of this research was to obtain a student-oriented perspective on how to ensure student well-being in various online learning environments in VET. The purpose of this study was to investigate the joy of studying in the asynchronous and synchronous online implementations of Finnish VET students.

The research question was, 'How do VET students describe their experiences of the joy of studying in online learning environments?'

We used the phenomenographic method, which can be used to determine the variation of meaning, understanding, and perceptions that people give to something or a phenomenon (Marton, 1981) and the ways of experiencing a certain phenomenon (Marton & Booth, 1997), the joy of studying in this case.

Research participants and data collection

We sought to identify the multiplicity VET students had for this particular concept (Ayene et al., 2019), as the analysis revealed a number of qualitatively different ways of experiencing the phenomenon and the structural relationships between them (Åkerlind, 2012). The data for the study were collected in two stages. First, we prepared a survey of VET students using the Webropol programme across Finland between November and December 2021. We analysed three open-ended questions from the survey to which the students (*N* = 290) responded in their own words. The open questions were as follows:

(1) What in an online course makes you feel positive or happy?
(2) What kind of online course implementation increases your motivation to study online?
(3) What do you think is meaningful about completing an online course?

At the end of the survey, there was a question asking for willingness to participate in the interview study. This request led to interviews with eight students. The interview was based on PERMA theory in such a way that questions were asked about the teacher's actions, feelings, tasks, and the synchronicity and asynchrony of online learning from each of the five elements (see the questions in Table 1).

Table 1. The survey questions.

	P. Positive emotions	E. Engagement	R. Relationships	M. Meaning	A. Accomplishment
Teacher's action	Which activities of the teacher support a positive feeling?	What kind of teacher's activity motivates you? What is a good online teacher like?	How should the teacher act to support activities between students?	What kind of teacher's activities do you consider meaningful in online studies so that you can achieve your own goals?	How should the teacher act so that the teaching is clear?
Feelings	What kind of activities and tasks make you happy in online studies?	What kind of online studies motivate you?	What kind of feelings do you get when you work together with other students?	What is relevant in online studies?	What do you think about online courses where you have to put in the effort to get good results?
Tasks	What kind of tasks make you feel the joy of studying?	What kind of tasks inspire you and motivate you to study?	What kinds of tasks increase interaction between students?	What are the easy and/or suitably challenging tasks that you find meaningful?	What kind of tasks should there be in online studies so that you reach the goal of your studies?
Asynchronous/ Synchronous	How can positive emotions be brought out in online studies?	How do online courses get students to commit to completing assignments?	How important are student friends in an asynchronous/ synchronous online course?	How would it be useful to study the studies of your professional field online?	Which is a better way to study online, asynchronous or synchronous, to achieve the goals of the course?

Background information.

Your age? What field are you studying? Basic training? How long have you been studying? Experience of online studies? What kind of distance learning arrangements have you participated in?

The thematic interviews took place in Zoom or Microsoft Teams during February and April 2022. The longest interview lasted 1 h and 13 min, and the shortest interview lasted 25 min. The interviews were recorded, and the time of all videos totalled 5 h and 46 min. A transcript was created from the tape, and 119 pages of text were produced.

The research participants are presented in Table 2.

Analysis

The data were analysed using the phenomenographic 'cross table' method, following the instructions and examples provided by Åkerlind (2005), Marton (1981), and Marton and Booth (1997). This analysis method has been used in several educational studies (e.g. Anđić et al., 2023; Khan et al., 2019; Paakkari, 2012).

In the first step of the analysis, the answers to the questionnaires and the transcribed text of the interviews were entered into Atlas.ti. I was responsible for coding the data. A total of 236 transcripts of the material were produced. The aim was to reduce and interpret the phenomenon in question with selected transcripts of all the answers of the interviewees and respondents. The interviewees were given codes 1–8, and the survey respondents were given codes 9–290. The selected transcripts formed a databank that served as the basis for the next decisive step of the analysis (Åkerlind, 2012).

In the second step, the transcripts were read and classified into different units of meaning based on their similarities. Attention was paid not only to the text but also to the meanings embedded in them. Each transcript had two contexts in which it was interpreted: the interview from which it was taken and the 'collection of meanings' to which it belonged (Åkerlind, 2012; Kettunen & Tynjälä, 2022). Sin (2010) instructed that transcripts should not be analysed or interpreted in isolation from

Table 2. Respondents' gender, age group, undergraduate education, and completed studies.

	Survey response		Interviews	
	number	%	number	%
Gender				
Woman	159	54.8	3	37.5
Man	107	36.9	5	62.5
Other gender	11	3.8	0	0
I don´t want to say	13	4.5	0	0
Respondent age				
15–18 years	134	46.2	1	12.5
19–25 years	39	13.4	0	0
26–30 years	21	7.2	1	12.5
31–40 years	37	12.7	1	12.5
41–64 years	59	20.3	5	62.5
Basic education				
Primary school	126	43.4	2	25
High school	27	9.3	0	0
Vocational degree	103	35.5	3	37.5
University of applied sciences degree	18	6.2	2	25
Higher university degree	8	2.8	1	12.5
Someone else	8	2.8		
Study period				
Less than 1 academic year	123	42.4	4	50
Less than 2 academic year	111	38.3	3	37.5
Less than 3 academic year	44	15.2	1	12.5
More than 3 academic year	12	4.1	0	0
Total	290	100	8	100

each other but together to form a complete dataset in which meanings are interpreted in relation to others.

As a result, the units of meaning that emerged from the transcripts were grouped into four different *themes*: pedagogical design, relationship with the teacher, relationship with the student group, and perception of self as a student. Table 2 provides an example of how the transcriptions of the theme 'pedagogical design' generated meaning units.

Simultaneously, the data were analysed again until categories started to come forward (Paakkari, 2012; Sin, 2010; Straub & Maynes, 2021). According to Åkerlind (2022), we can analytically divide the understanding of a phenomenon into parts, but from an experiential perspective, the phenomenon is always experienced as a whole. This explains the dialectical relationship between meaning and structure. When the units of meaning were divided into themes, the same categories began to emerge from each of the four themes. The categories answer the question 'What' and describe how a particular thing relates to other things (Åkerlind, 2012; Harris, 2011; Paul & Tansy, 2020).

From the aforementioned four themes, the phenomenographic analysis resulted in four *categories*: practical learning using digital programmes, independent learning online, collaborative learning online, and working life-oriented learning using online learning. Table 3 provides an example of how the pedagogical design theme generated meaning units that were divided into four categories.

As is typical of phenomenographic research (Marton & Booth, 1997), the categories in this study were hierarchical, with the stronger categories at the top covering the lower levels. This also clarified the relationship between the themes and categories found (Marton & Booth, 1997; Straub & Maynes, 2021; Vuori, 2021).

In the third step, *description categories* were formed between themes and categories (Kettunen & Tynjälä, 2018). In the description category, the results were described in a theoretical and more abstract way, summarizing the content of the data as closely as possible to the original data (Huusko & Paloniemi, 2006). Table 4 shows how the meaning

Table 3. Pedagogical design theme and category formation.

Transcription of examples	Meaning unit	Categories
The new Moodle is easy to use and easy to respond to by email. Others are difficult. Not possible without live guidance 100%. (219, survey)	Practical tasks The student sees what is being taught Theory connects to practice The challenges of digital program technology	(1) Practical learning using digital programs
The assignment is clear, the deadline and where to return the assignment are clear. (189, survey) Functionality of the technology. Technical support when needed. (200, survey) Functionality, links work and the working platform works. (185, survey) ...suitably challenging and varied tasks. (193, survey)	Clear tasks Instructions on the time and place of return Tasks are chunked down Functionality of the platform Availability of digital guidance Variety of tasks Tasks have been invested in and updated Use of video for learning	(2) Independent learning online
...I had to make an effort perhaps the most in those classes where no questions were asked in between, that I just had to listen, it would have been really challenging to stay awake in the class ... (4, interview). The teacher knows the technique and is able to help the student if necessary. (78, survey)	Clear and understandable implementation Versatile and interesting implementation Possibility to record lessons Activating group learning	(3) Collaborative learning online
... to think about or approach the whole study in a new way, from a different direction than the one we are currently looking at. (3, interview) The course contains things that I really feel would be useful, for example, for my future working life. (137, survey) ...but then the practical experience of the subject matter that is taught... (2, interview)	Timelines and relevance to working life Tasks support the skills needed in working life Work-based course content A work-based perspective in the course Examples from working life	(4) Work life-oriented learning using online learning

units were first divided into *subcategories*. The subcategories facilitated the creation of description categories. Four description categories were created from one theme, of which each description category was connected to one category. Description categories are intended to represent a certain way of understanding and giving meaning to the phenomenon under study (Åkerlind, 2022). They answer the question 'How' (Harris, 2011; Paul & Tansy, 2020).

Eventually, the descriptive categories combined themes with categories in a cross-tabulation model (see Table 4) to create an outcome space (Åkerlind, 2012). The themes that cross the data are called *variation dimensions* because they reveal the aspects that separate the categories and provide clarification of the relationships between different ways of experiencing the same phenomenon (Åkerlind, 2012; Kettunen & Tynjälä, 2018). The descriptive categories emphasize the overall meaning and outcome space of the structures of the whole (Åkerlind, 2022). There are no subcategories in the outcome space.

The final stage of the analysis focused on ensuring that the descriptive categories met the three primary criteria defined by Marton and Booth (1997) for assessing the quality of the phenomenal outcome space.

Table 4. Formation of description categories from meaning units.

Meaning units of pedagogical design	Subcategories	Description category	Categories
Practical tasks The student sees what is being taught Theory connects to practice The challenges of digital program technology	Tasks and exercises to be performed in practice Studying without using technology independently The challenges of technology	Practical working	(1) Practical learning using digital programs
Clear tasks Instructions on the time and place of return Tasks are chunked down Functionality of the platform Availability of digital guidance Variety of tasks Tasks have been invested in and updated Use of video for learning	Clear tasks Clear task return place and time A working network environment Versatile tasks	Working independently	(2) Independent learning online
Clear and understandable implementation Versatile and interesting implementation Possibility to record lessons Activating group learning	Clear implementation Versatile implementation Activating and cooperative ways of working	Working together	(3) Collaborative learning online
Timeliness and relevance to working life Tasks support the skills needed in working life Work-based course content A work-based perspective in the course Examples from working life	Tasks that support the skills needed in working life Work life-oriented implementation	Working life-oriented	(4) Work life-oriented learning using online learning

Table 5. Results of the study.

	Categories			
Dimensions of variation	Category 1. Practical learning using digital programs	Category 2. Independent learning online	Category 3. Collaborative learning online	Category 4. Work life-oriented learning using online learning
Pedagogical design of learning	Practical working	Working independently	Working together	Working life-oriented
Relationship with the teacher	Encounter	Individual guidance	Group guidance	Working life-oriented guidance
Relationship to the student group	Collaborative learning in practice	Independent learning online	Peer learning online	Collaborative learning in working life
Self-perception as a student	Local learning supports learning	Achieving objectives	Success in collaborative skills	Opportunities for success in working life

Results

Next, we introduce findings in the categories 'Practical learning using digital programs,' 'Independent learning online,' 'Collaborative learning online,' and 'Work life-oriented learning using online learning' based on the dimensions of variations that were the pedagogical design of learning, relationship with the teacher, relationship to the student group, and self-perception as a student. Table 5 presents the results.

Category 1. Practical learning using digital programs

Experiences of the joy of online learning in implementations at the educational institution formed the first section of the results. The students stated that the joy of studying was produced by practical learning using digital programmes. The joy of studying was generated by the use of different digital programmes. The students could face technological challenges that they could not overcome without their teachers' help. Studying at the school premises brought joy because some students found it difficult to concentrate on studying online at home.

> The new Moodle is easy to use and easy to respond to by email. Others are difficult. Not possible without live guidance 100%. (219, survey)

> The online courses have only been detrimental to my own learning. Text walls, technical problems, too many distractions at home, nothing sticks. (180, survey)

The students reported that not everything could be studied online. The joy was in studying advanced subjects in class and practicing them on the spot, while they preferred studying basic theories online. The students perceived that the joy of studying online could be enhanced if they completed practical tasks as part of online studying.

> … basic theory from there and online, but then when you go a bit deeper, you have to be at least on the spot and in front of the thing in this work. (1, interview)

> …so practical, that it does not just ask how these things are done, but it is through examples. (1, interview)

In this category, the students enjoyed having face-to-face conversations with fellow students in class rather than online. They also enjoyed learning during school hours because they perceived that they might not have been motivated to complete online studies after school hours.

> … it's quite a lot harder to get that conversation time with people when you're doing that on the spot. (1, interview)

> … online courses compared to face-to-face courses are boring. (86, survey)

In sum, not all students found online learning meaningful, but they believed that the joy of studying was stronger in classroom-based learning when they could receive practical guidance, even if online learning environments were used as a part of teaching.

Category 2. Independent learning online

The second category presents students' perceptions of the joy of studying when studying independently and asynchronously online. In these online learning arrangements, the students perceived that the joy of studying increased if the course assignment, due date, and place were clearly written and the tasks of varied designs helped monitor one's own progress. Self-directed studying by, for example, choosing between tasks or the method of studying was appreciated by the students. According to the students' perceptions, they were motivated if the tasks were sufficiently challenging.

The students mentioned that if the teacher had invested in the tasks and the tasks and their material were updated, they found it motivating to study the course. Furthermore, the joy of studying was enhanced by functional digital platforms and technical support.

> The assignment is clear, the deadline and where the assignment is returned are clear. (189, survey)

> Task assignment broken down into small enough sections helps to focus on the issue at hand, but it is also good to see the progress stage itself somewhere, i.e. the progress of the task is constantly on display. (215, survey)

> …suitably challenging and versatile tasks (193, survey)

> Functionality of the technology. Technical support if needed. (200, survey)

The joy of studying increased when the teacher gave feedback and guided during the online course, even if studying took place without the teacher's presence. On the other hand, the students' perception was that the feedback should be more versatile and should also enable them to correct incorrect tasks in order to learn more.

> . . . but all the teacher does is give me, me (Moodle) the key and organise the exam, that it's not very inspiring. . . (2, interview)

> . . .you get the result immediately after you have done the task, so you don't have to stress for weeks whether you even passed the task. (209, survey)

> . . .yes, it motivates you to use it, even if the teacher is an active teacher there, and also follows it on Moodle. . . (6, interview)

> . . . constructive or positive feedback, but I think it's important to have it. (5, interview)

In the independent online learning category, the joy of studying also appeared as the experience of being able to complete studies regardless of time and place and to plan the study schedule independently. Independent online studying also brought joy to those students who had difficulty concentrating, as they were able to concentrate on their studies better at home.

The students said that the joy of studying was enhanced by not having to commit to group work schedules and suffer from inequal amounts of work and abilities between group members. They also enjoyed completing tasks at their own pace without having to wait for other students' contributions. The students in this category appreciated their privacy and enjoyed studying without cameras and the obligation to participate in online discussions.

> When they don't affect my studies and I affect my studies, how good am I at that, not me, I don't think it's necessary for us to have students in contact. . . (6, interview)

> The fact that you can complete it independently and when and where you want. (207, survey)

> That everyone learns in their own style. For example, you don't have to talk or keep the camera on. (157, survey)

In this category, the students thought that the joy of studying increased when they noticed that they were learning and that the course was progressing. It was also pleasant to succeed in challenging tasks, while easy tasks were perceived as frustrating.

> When you complete tasks and see your own progress. (296, survey)

> When I get a task done that challenges me. (201, survey)

> That the tasks are not too many for the time and are ones that I can easily complete without the presence of a teacher. (122, survey)

> . . .can easily dictate work schedules to themselves, as long as the course tasks are completed and returned by the deadline. (136, survey)

Category 3. Collaborative learning online

In the third category, perceptions of the pleasure of learning were related to synchronous online learning where the teacher was present. The students perceived online learning joy when the teacher was able to give a varied presentation of the subject matter and used storytelling to increase interest. The students emphasized that the joy of studying was enhanced when the teacher spoke clearly and understandably and used varied and activating teaching methods, including group work. Traditional lectures were considered merely frustrating. The students also appreciated whether the teacher was familiar with online technology and could assist the students when necessary.

...I had to make an effort, perhaps most of all, in those lessons where no questions were asked in between, that I just had to listen, it would have been really challenging to stay awake in the lesson. (4, interview)

...the students certainly don't fall asleep on the other side of the screen or on the lower ceiling watching a TV series or something like that... (2, interview)

The teacher knows the technology and is able to help the student if necessary. (78, survey)

The joy of studying is enhanced if the teacher has skills that promote grouping and community. The joy of studying is also increased by the positive, encouraging, and interested attitude of the teacher. Teachers' positivity, friendliness, and cheerfulness are communicated to students. The joy of studying comes from the fact that teachers have clear communication skills, and they consider and treat all students equally. It is also important that you ask teachers for help and get help quickly. The joy of studying also increases if the teacher's face is visible during the online session and if the teacher can be approached easily.

...but you know that if a situation arises, the teacher is immediately available and can ask for help if you need it... (5, interview)

...if you study in a group, so there comes the problem that some progress faster, others slower and yet the teacher should keep it that way all the time. You have to keep the package together... (2, interview)

...creating such a kind of atmosphere in the group. And I believe that the teacher plays a big role in that. (8, interview)

The joy of studying increases when students can work in groups and discuss and share experiences with each other. Students understand that they learn from each other, and the teacher activates with various tasks and listens to the students in conversational situations. Seeing other students is also considered important in an interaction situation. Students perceive belonging and working in a group as an important part of the joy of studying. Success in teamwork motivates and brings a feeling of joy.

Hearing other students' views and experiences of what they are learning. (163, survey)

...that kind of discussions and cooperation with others, so yes, it gives a lot... (8, interview)

... Teams is, is better, but after this there is such a contact ... that's where Moodle is, somehow, you can't see that teacher from there. (8, interview)

...these interaction tasks were wonderful... (8, interview)

Feeling that you belong to a study community with others. (24, survey)

Category 4. Work life-oriented learning using online learning

The fourth category describes the connection between the joy of studying and the working life connection of VET. The close link and collaboration of VET with working life enhances the joy of studying. Online learning in the workplace is perceived as a future trend. The joy of studying is produced by online tasks that are current and working life-oriented and give support for the skills needed in the working life of one's professional field.

... to think about or approach learning in a new way, i.e. from a different direction than the one we are currently looking at. (3, interview)

...more should be with the world of work and the world of work, more connections. Really real connections should be... (3, interview)

The course could include things related to real working life, such as training for picking up goods (logistics and transport or driver training, etc.). It would be very important that the topics covered in the course are fresh, topical, taken from real working life. (189, survey)

According to the data, teachers' active interaction and cooperation with working life enhances the joy of studying. The joy of studying is also experienced if teachers give authentic examples from working life. This requires that teachers' substance knowledge and knowledge of the skills required in working life be up to date. The joy of studying is also produced by the fact that teachers maintain their skills by educating themselves.

> The course contains things that I really feel are useful, for example, for my future working life. (137, survey)

> …but then the practical experience of what is taught… (2, interview)

> Teachers should also be in working life from time to time, so that they know what happens there. (189, survey)

Discussion

Summary of findings

The research shows that VET students experience the joy of studying in various online learning environments. The joy of studying is enhanced when students are able to choose online studies that support their learning. Some students experience the joy of studying in a classroom using digital software, and some experience it when they can study asynchronously, regardless of time and place. In addition, the joy of studying is felt when studying synchronously with others or when studying is linked to working life and can even be done from working life.

According to the data, the role of teachers as facilitators and providers of feedback emerges strongly. This is in line with the constructivist model of digital learning, where hands-on learning and independent online learning are facilitated by teachers (Lou & Xu, 2022). The constructivist model of digital learning can also be interpreted as taking place in a classroom setting with online self-study materials and collaborative synchronous online studying.

A socioconstructivist digital learning model is emphasized in collaborative online learning and work-oriented online learning. In this case, VET students experienced a sense of joy in synchronous online studies as the key features of learning, such as interaction and dialogue with other students or representatives of working life (Smith, 2022.) Studying can take place in working life, and different online environments can sometimes be used.

In addition, the students experienced the joy of studying when receiving guidance and encouraging or positive feedback from the teacher. Teacher-designed tasks were seen as enjoyable when they were sufficiently challenging and had clear instructions, and there was time and place for returning the task. The students also felt joy when they succeeded in their studies and achieved the set goals.

Joy of studying from the PERMA perspective

Next, the results are discussed according to the five elements of PERMA theory: positive emotions (P), engagement (E), relationships (R), meaning (M), and accomplishment (A). These elements are focal points when designing online learning that aims to support and strengthen VET students' well-being.

This research shows that **positive emotions** that bring joy to studying play an important role in online learning. VET students feel joy when their teacher is positive, encouraging, and interested in the subject being taught. Positivity, friendliness, and happiness are conveyed to students in different online learning environments. The joy of studying is created when the teacher has clear communication skills; it is also enhanced when the teacher considers and treats all students equally. In online learning, teachers' guidance and interaction skills are important, regardless of how digital learning environments are used to support learning. According to Danchikov et al. (2021), a teacher's interaction with students has a significant impact on whether or not students like online learning.

According to Khan and Thomas (2022), the constructivist approach focuses on learning, interactive teaching, and alternative assessment methods. In teaching, the focus is on the process, and not on the end result, so that students are active and receptive to learning. This generates numerous positive emotions that maintain students' interest in learning and building new knowledge.

Engagement emphasizes the feeling of commitment and immersion in learning activities (Seligman, 2011). Engagement is also referred to as Csíkszentnvirmihályi's flow theory (Jackson & Csíkszentmihályi, 2000). In this study, the students were happy if the tasks were versatile, not too difficult, and not too easy. The joy of studying was also brought if the tasks were working life-oriented. The students who studied asynchronously enjoyed being able to influence the tasks by choosing the way they could do them or by choosing the tasks that suited them best.

In this study, the **relationship** element of PERMA theory is reflected in students' motivation to work collaboratively online. The joy comes from being able to talk to others, share experiences, and learn from each other. When working with a group, joy comes when the teacher is quick to help, treats students fairly, and has good group management skills.

As Smith (2022) pointed out, according to the socioconstructive model, teachers play an important role in activating students' dialogue in synchronous online learning. Students may even prefer studying synchronously because they think it helps develop interaction and communication between students and instructors. A major reason for dissatisfaction with online courses is the lack of interaction between teachers and students (Danchikov et al., 2021; Heuberger & Clark, 2019).

According to Upadyaya and Salmela-Aro (2013), the social environment also has a significant impact on the development of enthusiasm for school. Young people develop social interactions by regulating their behaviour. Friends, teachers, and a supportive atmosphere play a key role in the development of school interests, but parents also play an important role.

Students' well-being increases when they are motivated to find their own **meaning**ful lives (Seligman, 2011). In this study, meaning comes to the fore in different learning environments where students feel joy while studying and where they feel they learn best. Some of the students experienced the joy of studying while studying in the classroom because they received concrete support from the teacher. In addition, in Bączek et al. (2021) study, online learning was considered less effective than face-to-face learning in terms of skills and social abilities. On the other hand, even when learning online, the joy of studying was brought about by the teacher's support and feedback. In this study, the joy of studying for some of the students was increased by the opportunity to study at home and learn at their own pace. This finding has also been found to be relevant in other studies (Bączek et al., 2021; Zembylas, 2008).

The students also perceived the joy of studying from a teacher with a high level of expertise in their field and who could utilize working life connections. The students were happy to receive training relevant to their field of study, which would enable them to find better employment. Danchikov et al. (2021) pointed out that a lack of teacher qualifications may be the main reason for the decline in the effectiveness of online lessons.

A feeling of **accomplishment** can be seen as a desire to work towards goals and aim to achieve them. According to Seligman (2011), this means that there are motivation and self-efficacy to accomplish what is intended. VET students feel joy in their studies when the tasks are clear and when they have clear instructions concerning the return of the assignment. They feel happy if they receive feedback from the teacher quickly and are able to monitor their own progress in their studies. They also feel happy if their studies are linked to working life. The tasks must be work-related, and the teacher must also have good subject knowledge and relationships with working life.

The ability to learn new skills will be an increasingly important skill for organizations and individuals in future working life (Lyly-Yrjänäinen et al., 2023). This is why VET online studies should be developed to be working life-oriented so that students can practice online learning from the perspective of continuous learning in working life. It is not just about doing well in future work but also about enhancing well-being and experiences of meaningfulness. Lyly-Yrjänäinen et al. (2023) found that formal training is more useful if the learning can be applied in practice afterwards.

Learning at work does not happen by itself, but it requires structures, planning, and development that support learning. Enthusiasm for school is also important, as it has been found that school enthusiasm later leads to the absorption of work in working life (Upadyaya & Salmela-Aro, 2013).

Limitations and reliability

Phenomenographic research has specific limitations and advantages. We followed Sin's (2010) guidelines for evaluating reliability in this research. First, in qualitative studies like the one at hand, researchers' voices in reporting are inevitable, but this article has sought reflexivity throughout the research process, including in reporting the results (Sin, 2010). This article has described, as precisely as possible, the different stages of the study, the interviews, how the analysis progressed, and how it was conducted. Data extracts have also been included with the description of the analysis so that the figures can be followed up and the reliability of the study can be assessed.

The reliability of the analysis is based on the dialogical reliability check often used in phenomenographic research, whereby the researchers reached a consensus through discussion and mutual critique of the data and each researcher's interpretive hypotheses (Åkerlind, 2012). This was done to ensure agreement between the final categories and the findings from the data.

In this study, the validity of the outcome space was primarily based on presenting the appropriateness of the internal logic of how the categories relate to each other (Marton, 1981). The set of descriptive categories is based on the analysis of a set of interview transcripts as a group, not on a single transcription. This means that a single transcription may represent more or less aspects of the phenomenon under study (Åkerlind, 2012).

This research included quite wide sets of material covering the whole of Finland for data among VET students. Representatives of different genders, both young and older students, participated in the interviews. Further research could focus on student experiences in a specific field of VET, thus providing more vocational-based information about the joy of studying. In addition, the teacher's perspective would be a relevant addition to this discussion.

Conclusion

The importance of the components of PERMA theory in building the joy of studying shows that positive emotions and their importance as a source of building human strengths should be the basis for making content and structural choices in education. Online learning should not be based on the mere submission of assignments to an online platform but on students being active agents and receiving feedback.

This study offers some important practical contributions to the development of online courses in VET. First, we should offer students different options for completing online learning. This same phenomenon is also found in other studies, and differences in course expectations are assumed to be due to the learning style of the individual (Heuberger & Clark, 2019). Furthermore, the students did not perceive a difference in learning methods between face-to-face and online learning when considering the ability of learning methods to increase knowledge (Bączek et al., 2021; Danchikov et al., 2021).

Second, the research showed that teachers play a major role in fostering the joy of learning when designing and developing online learning. Teachers should be encouraging and positive and should use different and varied learning methods.

Third, tasks given to students should be interesting and useful, with relevant content for future employment. Online environments and different software also allow teachers to design different kinds of learning environments for different learning purposes. This research contributes information about how students' perceptions and experiences vary in different environments.

When education uses online learning, students need to practice more independent methods for learning and finding information, but they also need to apply and learn in online environments. As

learners' needs evolve, it is important that education evolves in terms of the teaching methods used (Moore, 2020). Therefore, successfully integrating online learning into the curriculum requires a strategy and a more proactive approach from the training provider (Bączek et al., 2021). We should listen to students' wishes and offer them the possibility of online learning, where they experience the joy of studying together with the stimulating and positive atmosphere of a teacher in a working environment.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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