

Kaiser, F., Marhuenda Fluixá, F., & Palomares-Montero, D. (2021). Common challenges European VET teachers as innovators are facing and their impact on academic VET teacher education. In C. Nägele, B.E. Stalder, & M. Weich (Eds.), *Pathways in Vocational Education and Training and Lifelong Learning. Proceedings of the 4th Crossing Boundaries Conference in Vocational Education and Training, Muttenz and Bern online, 8. – 9. April* (pp. 183–189). European Research Network on Vocational Education and Training, VETNET, University of Applied Sciences and Arts Northwestern Switzerland and Bern University of Teacher Education. <https://doi.org/10.5281/zenodo.4610025>

## **Common Challenges European VET Teachers as Innovators Are Facing and Their Impact on Academic VET Teacher Education**

**Kaiser, Franz**

franz.kaiser@uni-rostock.de, University of Rostock

**Marhuenda Fluixá, Fernando**

fernando.marhuenda@uv.es, University of Valencia

**Palomares-Montero, Davinia**

davinia.palomares@uv.es, University of Valencia

### **Abstract**

Considering the many challenges VET educators face, VET TE providers need to find answers to best design their education and training. The network “VETteach” aims at sharing good practice on current and future requirements of VET TE in the development and application of curricula, pedagogical and didactical approaches. The project partners of VETteach are from six European countries. All of them work in universities that have a long tradition as VET TE providers. Most of them are responsible for the education and training of future VET educators at their Universities. The contribution offers an insight into the project aims and deepens findings from an exchange workshop that focused on fostering civic engagement and self-reflexivity among teachers in December 2020.

### **Keywords**

VET-teacher education, academic lecturing, challenges, innovation, self-reflexivity

## **1 Background**

High-quality academic education and training of future VET teachers and trainers and their continuous professional development is a prerequisite and guarantee of excellent vocational education and training for youth in transition from school to work. The Riga Conclusion from 2015 highlights the decisive role of VET providers stating that “systematic approaches to, and opportunities for, initial and continuous professional development of VET teachers, trainers and mentors in school and work-settings” (p. 4) are needed. Similarly, in an outlook post-2020, the Advisory Committee on Vocational Training emphasizes that VET needs to be delivered by highly qualified teachers and trainers and that the professional development of teachers and trainers should be fostered, including digital skills and innovative teaching methods (ACVT, 2018). A recent report of the ET 2020 Working Group on VET (ET 2020, 2018) highlights four areas of action to support educators: specifying the roles of teachers and trainers, strengthening their professional development, equipping teachers for critical challenges, and fostering collaboration.



In 2020 an Erasmus+ project started with Partners from Sweden, Finland, Spain, Switzerland, Norway and Germany to exchange experiences of good practice in academic education of VET teachers to further improve the didactics of teaching education in Europe.

## 2 Common challenges in VET teacher education (TE)

To reach these goals, high-quality education and training of VET educators are indispensable. VET TE must take into account the many and very diverse challenges that current and future VET educators face. These are, for example, increasing heterogeneity of learners, rapid technological changes, the demand to take on more and broader educational tasks and to adapt to new forms of work organisation (e.g., the flexibility of working hours, teleworking). VET educators must adapt the learning goals and didactical concepts of their teaching to ensure the political participation of learners in society (Kaiser & Ketschau, 2019) and need to design learning situations that allow their students to develop practical and academic competences. They must establish innovative learning arrangements at schools and in companies (Lahn & Nore, 2018), which incorporate digital learning tools, open new opportunities to foster individual learning processes and occupation-specific forms of learning in different vocational fields. To do so, they must be able to analyse work processes to determine the competences required at the workplace (Virtanen et al., 2014). They should initiate and sustain close relationships and co-operations with (regional) companies. There is also a growing demand to support, advise and accompany an increasingly heterogeneous group of VET learners which asks for an educator's competences to guide other people. It is expected that VET educators support disadvantaged learners as well as talented VET students: They must guide their students in developing their professional career and facilitate the integration of students in the labour market (Stalder & Lüthi, 2020). People in VET need to adhere to democratic and European values while they are fully developing their potential in a lifelong perspective. To become critical citizens, VET educators thus need to enable learners to raise their voice in democratic processes in the workplace, at school and beyond (Kaiser, 2018).

Taking this into consideration the following five key challenges of VET educators can be identified:

- Civic engagement, which is often demanded but not implemented. It could be inspired through participatory teaching, based on humanistic psychology and critical theory. Young people need more than practical skills training and abstract thinking. They need to experience open conversation, reflect on themselves and their backgrounds and associated values, and realize that they can influence social processes determine the world of work and their lives. By dealing with historical developments and reflecting on their own biography as well as experiencing authentic encounters in an exemplary way, young people can be encouraged to participate critical democratically. (Kaiser, 2020).
- VET teachers further training and learning at the workplace where educators need to adapt to a situation in which they have to assess competences and not only knowledge and skills (from input to output orientation) (Virolainen & Stenström, 2015). And the need for VET educators to invest in their continuing professional development (Andersson et al., 2018). Vocational knowledge is more often valued insofar it is applicable and can provide evidence in terms of performance at work, in a way that the practical dimension is gaining increasing weight with relation to academic knowledge. However, digitalisation and smart production processes require of workers and learners demanding cognitive processes to guarantee proper understanding and to allow appropriate decision taking. These require a different balance between learning achieved in VET schools and learning achieved in companies, all of which require an adaptation on the side of VET teachers, whose knowledge of real processes in companies must be updated and accurate.

- VET teachers as guides of their students and their careers that puts the focus also on socialization processes and the aspect that VET educators need to become aware of the specific competences they need to support students in their career (Stalder & Lüthi, 2020). The opportunities for young people to shape their lives have multiplied; with respect to where they live, the educational and job careers they take, and the lifestyle they prefer. These orientations have a strong influence on the motivation of the learners (Nägele & Stalder, 2019). As a result, the need for support has increased, and with it the demands also on professional teachers
- The integration of disadvantaged people is a constant claim all over Europe but becomes even harder to implement in economically troubled times. We also need to prepare VET educators for situations when political support breaks down, and new ways to integrate disadvantaged people need to be found (Marhuenda, 2019; Martínez & Marhuenda, 2020).
- Digitalisation at the workplaces and in learning have a fundamental impact on VET educators as their traditional roles are challenged (Lahn & Nore, 2018). Digitalisation is, therefore, a topic that has an impact on all issues mentioned above.

### **3 Different approaches to strengthen self-reflexivity of VET teachers – insights from Spain and Germany**

The following findings are the results of a joint workshop held as part of the VET teach project in December 2020. Approaches to integrate civic engagement into TE to meet the identified challenges exist in Valencia University in Spain as well as in Rostock University in Germany. Both approaches focus on fostering reflective critical thinking and social engagement but use different methods to do so. Valencia University is using narrative methods and case studies to debate on reflective teaching. Rostock University uses critical theory, biographical self-reflexivity by confronting students with their values and character, with texts on Bildung and authoritarian regimes and with refugees in more practical collaborations with civic engagement.

#### **3.1 Reflective thinking – the Spanish lectures**

In the case of Spain, we have to consider that formal VET involves teachers in schools and trainers in companies, while non formal VET hires trainers in vocational training providers, who do not have to comply with teacher requirements in the school system. They need to prove some pedagogical qualification (Ros-Garrido & Marhuenda-Fluixá, 2019, details on the master program here: Marhuenda-Fluixá, 2018). Access to the master for VET teachers in Spain happens after a 4 year degree (the application of Bologna in Spain resulted in degrees with 240 ECTS, hence for a period of four years) and master degrees vary between 60 and 90 ECTS (in the case of the master for secondary and VET teachers, 60 ECTS, including both a practical stage in VET schools as well as the master thesis). Furthermore, no professional experience is required to access the master.

We try to introduce reflective teaching in the compulsory module on general didactics, which is an annual module, 8 ECTS, in sessions of 2 hours each, twice a week (except the periods when students attend their placements in VET schools). Our approach to reflective teaching in educational practice is connected with theoretical perspectives on active pedagogy from the beginning of the 20th century and their update: experiential learning theory (Dewey, 1933; Kolb, 1984) argues that ideas are constructed and reconstructed through experience, rather than persisting as fixed and inviolable patterns of thought. True learning only occurs by reflecting on experiences (Dewey, 1933). We have reflected on our lecturing practice taking into account reflective thinking but also the narrative-biographical methodology, hence connecting knowledge built from reflection and critical thinking to the students' experiences. We

try to search cognitive dissonance to allow the establishment of new syntheses involving cognition, emotions and action. We try to introduce in our practice deliberate, conscious, systematic use of our mental resources.

In Higher Education, reflective teaching provides an excellent framework for planning teaching and learning activities and can be used as a guide for understanding learning difficulties, for career guidance and academic counseling, as well as being especially useful in processes supervision to analyze professional practices. In our practice, we rely upon the 4 levels of reflective thinking suggested by Leung and Kember (2003):

- routines (mechanical and automatic activity that is carried out with little conscious thought)
- comprehension (reading and learning not related to particular situations)
- reflection (active, persistent and careful consideration of any assumption or belief founded in our consciousness)
- critical thinking (awareness of why we perceive things, how we feel, act and do)

We have tried to apply these in the past years as follows: between 90 and 100 students of teacher education participated in our course since 2016/2017 up to date, and we introduced also our reflective processes with social pedagogy students since 2018/2019, starting with approximately 50 students and reaching 150 students in the past two academic years.

Our concrete proposal includes five tasks along three different stages, the center of which is a reflective seminar that we conduct in groups of approximately 50 students each and which focuses upon a book they are reading for our subject that semester. That book is chosen by them individually, among a series of books that match the purposes of the subject, as these books are not handbooks. We arrange one task during the seminar and one evaluation task after the seminar:

1. Briefing the seminar: Task 1 consists of establishing a group of students to which we refer to help us conduct the seminar, evolving in the coordination team. This team is in charge of task 2, consisting of the preparation of a script of questions to be answered in the seminar meeting. Task 3 is developed by all other students, who read the book and the script and reflect in written form on the questions provided by the coordinating team.
2. The seminar: Task 4 happens during the seminar, in sessions that range from 40 to 90 minutes, depending on the input of the students and the conduction of the conversation by the coordinating team. The script is only one, appropriate for the learning plan of the subject, but it has to be comprehensive to allow input that is contributed from the different books that students may have chosen.
3. Debriefing the seminar: There is a peer evaluation of the pieces written by individual students, annotated by them along the discussion in the seminar, and assessed by colleagues who have read the same or a different group.

This cycle of three stages and five tasks is developed three times every semester, focusing every time on the first approach to the book, the thorough analysis of one of its chapters, and a review of the book towards the end of the semester, when connections to the issues dealt in the subject evolve more fluently. The conducting group is always the same, preparing a different script for each of the three encounters.

After these years of applying the seminar method, we are confirmed about the possibilities that reflective thinking offers university students to know and use the terminology and knowledge they are studying in appropriate ways. It allows them to understand and become aware of their learning process, which in some cases evolves into building a conscious speech to overcome their own cognitive limitations and go beyond the activity itself. It increases the

possibilities of facing cognitive dissonances by allowing greater reflection, argumentation and evaluation of one's own beliefs and previous knowledge, going beyond the contents studied and approaching other contexts and spaces through the views of their colleagues during and after the seminar.

### 3.2 Good learning in balance– the German lecture

In preparation for the first practical observations in vocational schools after 3 semesters, VET teacher students explore models of vocational didactics. Beforehand, they have looked at the structures of vocational education including its historical development and at central concepts such as education, qualification, occupation, *bildung* and work in text work. This happens in a similar way to the Spanish example and in traditional courses with frontal readings and discussions.

While one seminar deals with the development of work process-oriented teaching, based on activity theory and work process analysis (Fischer & Boreham 2004), another is dedicated to the design of human relations and learning in groups.

This is about reflecting on one's own path to becoming a vocational teacher, role models and values that are unconsciously there, as well as dealing with the relationship between one's own teacher personality, the learner, the subject / topic and the environment in which this learning takes place (Kaiser 2018). Finding a balance between these four factors is a crucial characteristic of creating lively learning in an open atmosphere.

After the students have become familiar with the method of Theme centered interaction, they develop their own learning units of 90 minutes, which they design with topics of their own choice, using forms of learning that have not yet been tested for them, and then reflect on and evaluate them. In this way, they not only get to know each other much better as a learning group, but they also experience new methods to plan and evaluate learning and deal individually with their role and goals as teachers.

The topics they choose range from "How do we design a good lesson and school?", "We shape the world with our actions", to very personal topics like

- "turning big problems into small ones - my way of dealing with demands"
- "when leadership slips away from me - dealing with disturbances"
- "my strengths and weaknesses as a leader"
- "I change at any time - my handling of fearing change"
- "tackling and letting go - how do I learn to trust?"
- "Be different! My image of diversity".

The evaluation of the learning in this kind of settings give strong hints, that they raise their social cohesion, self-confidence and ability to express their opinions freely.

In the second master's semester, students attend a second seminar on didactics in preparation for the second internship, in which they then teach independently. Here, the same methodology is used and the focus now turns more strongly from personality topics to vocational teaching, which is still designed in a lively and experience-oriented way.

## 4 Conclusion

A joint project with researchers and teachers in the context of vocational teacher training at the European level. Like the "VETteach projekt" creates the opportunity for topic-oriented exchange that goes far beyond the depth that can otherwise be achieved in conferences. If the common time of exchange can be extended accordingly, mutual enrichment and impulses can be gained both for the design of joint academic education and for joint research. In the long

term, a joint doctoral program for the promotion of young researchers in a European perspective would be desirable.

## References

- ACVT. (2018). *Opinion on the future of vocational education and training post 2020*. Advisory Committee on Vocational Training of the European Commission, Employment Social Affairs and Inclusion, EU. <https://ec.europa.eu/social/BlobServlet?docId=20479&langId=en>
- Andersson, P., Hellgren, M., & Köpsén, S. (2018). Factors influencing the value of CPD activities among VET teachers. *International Journal for Research in Vocational Education and Training*, 5(2), 140–164. <https://doi.org/10.13152/IJRVET.5.2.4>
- ET 2020. (2018). *Teachers and trainers matter. How to support them in high-performance apprenticeships and work-based learning. 12 policy pointers*. ET 2020 Working Group on Vocational Education and Training of the European Commission, Directorate General for Employment, Social Affairs and Inclusion, Unit E3 – VET. Apprenticeships & adult learning, EU.
- Dewey, J. (1933). *How we think: a restatement of the relation of reflective thinking to the educative process*. Heath and company.
- Kaiser, F. (2018). Theme centered interaction in critical vocational teacher education – an introduction into an ethical founded method and model to strengthen self-reflexive autonomy and socially responsible action. *International Journal for Research in Vocational Education and Training*, 5(3), 191–207. <https://doi.org/10.13152/IJRVET.5.3.3>
- Kaiser, F. (2020). „Zu wissen, dass wir zählen, gegen die Kälte“ – Lebendiges Lernen als Teil des kritisch-subjektorientierten beruflichen Lehramtsstudiums. In R. W. Jahn, A. Seltrecht, & M. Götzl (Eds.), *Ausbildung von Lehrkräften für berufsbildende Schulen. Aktuelle hochschuldidaktische Konzepte und Ansätze* (pp. 69-90). Wbv.
- Kaiser, F., & Ketschau, T. J. (2019). Die Perspektive kritisch-emanzipatorischer Berufsbildungstheorie als Widerspruchsbestimmung von Emanzipation und Herrschaft. In E. Wittmann, D. Frommberger, & U. Weyland (Eds.), *Jahrbuch der berufs- und wirtschaftspädagogischen Forschung 2019* (pp. 13–29). Budrich. <https://doi.org/10.2307/j.ctvqsf3c7>
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lahn, L. C., & Nore, H. (2018). E-Portfolios as hybrid learning arenas in vocational education and training. In S. Choy, G.-B. Wärvik, & V. Lindberg (Eds.), *Integration of vocational education and training experiences purposes, practices and principles* (pp. 207–226). Springer Nature Singapore Pte Ltd. <https://doi.org/10.1007/978-981-10-8857-5>
- Leung, D.Y.P., & Kember, D. (2003). The relationship between approaches to learning and reflection upon practice. *Educational Psychology*, 23(1), 61-71. <https://doi.org/10.1080/01443410303221>
- Marhuenda, F. (2018). The education of VET teachers in Spain. The proposal of UVEG. *Improving teacher education for applied learning in the field of VET*, 73-100. Waxmann.
- Marhuenda, F. (2019). *The school-based vocational education and training system in Spain*.: Springer. <https://doi.org/10.1007/978-981-13-8475-2>
- Martínez-Morales, I., & Marhuenda-Fluixá, F. (2020) Vocational education and training in Spain: steady improvement and increasing value, *Journal of Vocational Education & Training*. <https://doi.org/10.1080/13636820.2020.1729840>
- Nägele, C., & Stalder, B. E. (2019). Motivation and engagement of learners in organizations. In S. McGrath, M. Mulder, J. Papier, & R. Stuart (Eds.), *Handbook of Vocational Education and Training: Developments in the Changing World of Work* (pp. 1–15). Springer International Publishing. [https://doi.org/10.1007/978-3-319-49789-1\\_106-1](https://doi.org/10.1007/978-3-319-49789-1_106-1)
- Ros-Garrido, A., & Marhuenda-Fluixá, F. (2019). The education of VET teachers and trainers. *The School-based vocational education and training system in Spain: achievements and controversies*. 32, 87-103. Springer. [https://doi.org/10.1007/978-981-13-8475-2\\_5](https://doi.org/10.1007/978-981-13-8475-2_5)
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education & Training*, 1–20. <https://doi.org/10.1080/13636820.2020.1721735>
- Virtanen, A. Tynjälä, P., & Eteläpelto, A. (2014) Factors promoting vocational students' learning at work: study on student experiences, *Journal of Education and Work*, 27(1), 43-70. <https://doi.org/10.1080/13639080.2012.718748>

**Biographical note**

Prof. Dr **Franz Kaiser** is Professor and founding director at the Institute for Vocational Education, University of Rostock in Germany. His lectures and research focus on curricula development, group dynamics, VET teachers, international VET and the critical theory of 'Bildung' in VET.

Prof. Dr **Fernando Marhuenda** is Professor of Didactics and School Organization at the University of Valencia. His research interests focus on vocational education and training as a means of social inclusion for young and adult people at risk.

Prof. Dr **Davinia Palomares-Montero** is Professor of Didactics and School Organization at the University of Valencia. Her research interests focus on social entrepreneurship in higher education.