# *What we can learn from Estonian vocational teachers' professionality model in the changing context of VET?*

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# What we can learn from Estonian vocational teachers' professionality model in the changing context of VET?

During the presentation, I will cover four main aspects:

1) The changes in VET, including the standardisation, as well as vocational teachers' (VTs') qualifications;

2)  How changes and standardisation have been experienced by VTs;

3) The main key factors that have formed the professionality  of Estonian VTs, based on relevant theories;

4) Conclusions and the practical implications of these findings for the training of VTs.

# *Estonian VET changes*

- In Estonia, numerous changes have taken place in VET at multiple levels over the last 30 years (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020).

- Six periods can be distinguished in the development of VET in Estonia (Loogma 2016; Sirk 2020):
  1) From 1990 to 1995, a period of the liberal adjustment of schools.
  2) From 1996 to 2000, a period of building the legislative framework for vocational education and training.
  3) From 2001 to 2004, a period of pre-accession to the European Union
  4) From 2005 to 2008, a period of continued intensive standardisation of VET
  5) From 2009 to 2013, a period of a transition to learner-centred and outcome-based learning
  6) From 2014 - … a period of transition to a changing approach to learning

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# 1990 -1995 the liberal adjustment of schools (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020; Sirk, 2020)

- Sudden changes took place when Estonia transferred from the Soviet regime to a democratic society.

- During a very short period of time the VET system in Estonia has developed from the Soviet, highly centralized dual system into a school-based system.

- The state was too weak to support reforms in VET

- Foreign experts and foreign funded projects played a significant role in re-building the Estonian VET system.

- EU programmes (PHARE) to initiate the development of modular curricula and in-service training of curriculum developers, updating of teaching materials and training of vocational teachers.

- In 1995, the Vocational Education Institutions Act was approved.

- In 1995, the Vocational Teacher Statute was adopted, introducing for the first time the term "vocational teacher"

# 1996 - 2000, a period of building the legislative framework for vocational education and training (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020; Sirk, 2020)

- In 1996, the requirements for the qualification of vocational teachers and their verification procedures were introduced. Different professional levels were: young teacher, teacher, senior teacher and teacher-educationalist

- In 1996, the reorganization of the vocational school network was launched

- In 1998, the conceptual bases of VET were approved

- In 1998, the Vocational Education Institutions Act was improved

- In 2000, the Professions Act was approved - provided the basis for the development of professional qualification requirements and setting the conditions and procedures for the assessment and awarding of professional qualifications.

- Started the development of professional standards and national curricula

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# 2001 -2004, a period of pre-accession to the European Union (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020; Sirk, 2020)

- In 2001, the Development Plan for the Estonian VET System 2001–2004 was adopted which was
  - The purpose of this plan was to prepare a competitive workforce for Estonian and international labour markets while <u>providing every young person</u> both social and professional readiness to work.
  - The purpose was to develop an attractive, flexible, <u>accessible</u>, modern, efficient and high-quality VET system (to improve the image of vocational education)
- The development of the curricula and the reorganisation of the network of VET institutions continued.
- In 2002, the new Requirements for Teachers' Qualifications were introduced – There were requirements that each VT had to have a <u>higher education</u> and to acquire <u>pedagogical skills</u> by the 31st of May 2003
- The first 5-level National Qualification System was introduced

# 2005 to 2008, a period of continued intensive standardisation of VET (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020; Sirk, 2020)

- The development of the national curricula intensified.

- New types of flexible education and training forms were introduced, including those for disadvantaged groups
  - Training for students without a basic education or VET based on basic education without acquiring a secondary education.
  - The study forms included both full-time (divided into school or workplace-based training) and non-stationary (where independent work forms more than half of the training) study options.
  - Students of different ages, backgrounds and levels of basic skills

- In 2006, the Professional Standard for VTs was adopted, which determined three professional levels (VET teacher III, IV and V) with detailed descriptions of the tasks, educational requirements and professional skills

- In 2008, new Professions Act was approved. Therefore a new eight-level professional qualification system was created. This change caused a renewal of the national curricula and professional standards

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# 2009 -2013, a period of a transition to learner-centred and outcome-based learning (Loogma, 2016; Sirk et al., 2016; Sirk et al., 2020; Sirk, 2020)

- The third development plan for the Estonian VET system was adopted.

- The key priorities for that period were adopting a learner-centred approach, high quality, timeliness and an appreciation of VET

- The focuses were for good teachers, curricula and teaching materials as well as efficient collaboration with the world of both work and social partners.

- Significant attention had to be paid to the dropout rate in VET and to the development of learner key competences to ensure their readiness for lifelong learning.

- Professional standards were updated causing changes in the VET curricula, which had to be aligned with the national curriculum and outcome-based learning.

- The volume of teaching was recalculated from the study week system to the VET credit point system (ECVET).

- In 2010, the Requirements for Teachers' Qualification expired and the Professional Standard for Vocational Teachers became the basis for assessing the qualification of vocational teachers.

- In 2013, the new Vocational Education Institutions Act was adopted, leading to the introduction of several new regulations.

# 2014 - … a period of transition to a changing approach to learning (Sirk, 2020)

- In 2014, the Estonian Lifelong Learning Strategy (2020) was adopted, which serves as a basis for further activities in VET
  - The main focuses were: changing approach to learning, professional and motivated teachers, lifelong learning that meets the demands of the workforce's needs, the digital shift and equal access to lifelong learning for all.
  - Therefore, the VET Programme 2018-2021 has been developed in line with the Riga Conclusions (European Commission, 2016).
- In 2015, the new the professional standards for vocational teachers at qualification levels 5, 6 and 7 have been in force, following a new eight-level qualification system with more detailed competencies describing teachers' activities.
- Vocational teacher training is provided in Estonia both at bachelor and master levels. The study programmes need to be in harmony with professional standards for vocational teachers. Vocational teachers who already have a higher education in a vocational field need to acquire pedagogical training
- In 2021, the renewed professional standard for vocational teacher was implemented, which included the addition of level 8.

- In general, the changes in Estonian VET since regaining independence have been (Grootings, 2009; Loogma, 2016; Sirk, 2020).
    - long lasting and systematic;
    - strongly affected by EU VET policy guidelines, as well as a strong tendency towards standardization.
    - focused on new VET legislations, standardizations, curricula and other reforms, various student groups and improving the image of VET, etc.
- VTs' work have changed radically during last 30 years and have become more regulated and complex, having different work roles (Sirk et al., 2016; Sirk, 2020).
    - Previously, teachers used to specialise in teaching theory or practical training, now vocational teachers have to teach both and also integrate vocational and general subjects.
- **At the centre of the changes in VET stands the vocational teacher who is seen as the key person in executing the changes, solving problems and reaching the objectives set** (Cedefop, 2012; Singh, 2011; Maastricht Communiqué, 2004; Misra 2011).
    - VTs must therefore first understand the need for and the meaning of changes, which requires them to change their current perceptions, behaviours and roles (Spillane et al., 2002).

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# Changes and standardization in VET experienced by vocational teachers

How changes and standardization have been experienced by VTs?

What impact have the changes had on VTs' professionality?

# Main conceptual bases: professionality

- The readiness to adapt to the changes should become part of teachers' **professionality** in their normal daily practice.
    - Teachers should first perceive, then frame, interpret and construct the meaning of the change (Spillane et al., 2002) so that it can become part of their professionality.
    - However, previous research has shown that VTs experience and perceive change differently (e.g. Boldrini et al., 2019; Vähäsantanen & Eteläpelto, 2009, 2011; Ümarik & Rekkor, 2013)

- Professionality is regarded as one attribute of professionalism (Hoyle, 1974, Evans, 2008):
    - Teachers' professionalism refers to status-related elements of the occupational group
    - Teachers professionality is related to individual elements of teaching work (e.g. skills, competences and procedures)

- **Teachers professionality is their own individual view of the everyday professional work including applied understandings, beliefs, knowledge, skills, and procedures, among other elements of their work** (Hoyle 1974, 2008).

  - **The collaborative learning** and decision-making **as elements of teacher professionality are outlined as facilitating adaptation to the changes** (Hoyle 2008).

  - Teachers' self-efficacy, pedagogical beliefs, commitment, individual aspects of teaching as well as the context of the work, can also describe and shape teacher professionality (Evans, 2008).

- Accordingly, Evans (2008, 26) has defined professionality as '*an ideologically-, attitudinally-, intellectually and epistemologically-based stance on the part of an individual, in relation to the practice of the profession to which s/he belongs, and which influences her/his professional practice*'.

- In his model of teacher professionality, Hoyle (1974) distinguishes restricted and extended professionals:
    - *the restricted professional* is autonomous, applies an intuitive approach and experience (versus theory) in his/her work and holds a narrow classroom-centred perspective in his/her work.
    - *the extended professional* has a broader view about the role of education in society, values theoretical knowledge, and conceptualises his/her work and role in shaping student lives; is involved in collaborative learning and decision-making etc.
- Evans, (2008) has treated these two types of professionals as the endpoints of a continuum on which teachers can be located at different points depending on their professional orientation.
- Hoyle (1974) argued that **collaboration** inevitably **decreases teacher autonomy**.
- Accordingly, the results were analysed from this theoretical perspective in order to conceptualise the professionality of Estonian VTs in the context of VET changes.

# VET changes that have most affected the work and professionality of VTs

The work of Estonian VTs and their working environment has been most shaped by (Sirk, 2020)

1) **The multifaceted standardisation of VET with collaboration** - VTs have evaluated this complex change as one of the most necessary changes in VET (Sirk et al., 2020), and the majority of them have also directly experienced the standardisation (Sirk & Liivik, 2017).

2) **The prioritisation of openness through the student population** - both challenging youths and demanding adult students need to be taught. VTs have different experiences of the changes (positive, negative and diverse) in the student population (Sirk et al., 2019)

3) **The image building of VET** - has mainly revealed in preparing students for vocational competitions.

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# VT clusters according to their perception of the necessity of the changes in VET (Sirk et al., 2020)

| Variables of changes in VET | M SD | I Cluster n = 25% Critics | II Cluster n = 24% Supporters | III Cluster n = 51% Moderate supporters |
|---|---|---|---|---|
| **Collaboration for the professional development of VTs** | M SD | 2,70$^{(II ja III)}$ 0,52 | **3,75$^{(I ja III)}$** **0,33** | 3,28$^{(I ja II)}$ 0,36 |
| Increased commitment to cultivating students | M SD | 2,32$^{(II ja III)}$ 0,55 | **3,53$^{(I ja III)}$** **0,42** | 2,76$^{(I ja II)}$ 0,45 |
| Transformation to outcome-based curricula and integration of subjects | M SD | 2,42$^{(II ja III)}$ 0,47 | **3,39$^{(I ja III)}$** **0,35** | 2,92$^{(I ja II)}$ 0,36 |
| **Implementation of an EQF system** | M SD | 2,69$^{(II ja III)}$ 0,52 | **3,76$^{(I ja III)}$** **0,30** | 3,34$^{(I ja II)}$ 0,44 |
| Change in assessment and professional certification of the work of VTs | M SD | 2,18$^{(II ja III)}$ 0,50 | **3,39$^{(I ja III)}$** **0,55** | 2,67$^{(I ja II)}$ 0,45 |
| Involvement in school management | M SD | 2,33$^{(II ja III)}$ 0,66 | **3,45$^{(I ja III)}$** **0,63** | 3,04$^{(I ja II)}$ 0,62 |

The items were measured on a four-point scale ranging from 1 'absolutely unnecessary' to 4 'absolutely necessary'
The means of the clusters have marked how clusters differ at a statistical significance level of ($p < 0.05$).

| Variables | M SD | Critics | Supporters | Moderate supporters |
|---|---|---|---|---|
| Self-confidence in teaching and supporting student | M SD | 2.96[II and III] 0.43 | **3.38[I and III]** 0.41 | 3.11[I and II] 0.39 |
| Self-awareness and supportiveness | M SD | 3.27[II] 0.45 | **3.53[I and III]** 0.43 | 3.31[II] 0.39 |
| Professional commitment and satisfaction with the work | M SD | 2.88[II] 0.53 | **3.24[I and III]** 0.50 | 2.96[II] 0.43 |
| The perceived status of VET teaching profession in society | M SD | 2.26[II] 0.60 | **2.63[I and III]** 0.70 | 2.30[II] 0.51 |
| *Intensity or frequency of involvement in professional collaboration and self-development in school* | M SD | 1.66[II and III] 0.50 | **1.99[I and III]** 0.51 | 1.83[I and II] 0.48 |
| *Collaboration-based curriculum development and teaching at school* | M SD | 2.05[II and III] 0.59 | **2.39[I]** 0.54 | 2.28[I] 0.55 |
| Learning in professional institutions | M SD | 2.03[II and III] 0.61 | **2.84[I and III]** 0.67 | 2.44[I and II] 0.60 |
| Learning from new experiences | M SD | 2.00[II and III] 0.66 | **2.58[I and III]** 0.75 | 2.32[I and II] 0.71 |
| Learning from project work | M SD | 1.79[II and III] 0.70 | **2.52[I and III]** 0.93 | 2.14[I and II] 0.77 |
| High level of professional learning | M SD | 1.96[II and III] 0.47 | **2.55[I and III]** 0.54 | 2.20[I and II] 0.51 |
| Traditional beliefs in teaching | M SD | **2.84** 0.49 | 2.72 0.62 | 2.75 0.53 |
| Constructivist beliefs in teaching | M SD | 3.19[II and III] 0.46 | **3.51[I and III]** 0.35 | 3.35[I and II] 0.43 |

*Variables were measured on a three-point scale (1-never, 2-seldom, 3-often), other on a four-point scale

The main key factors that have formed the professionality of Estonian VTs, based on Hoyle's model of teacher professionality

# Three clusters of VTs based on Hoyle's model of teacher professionality

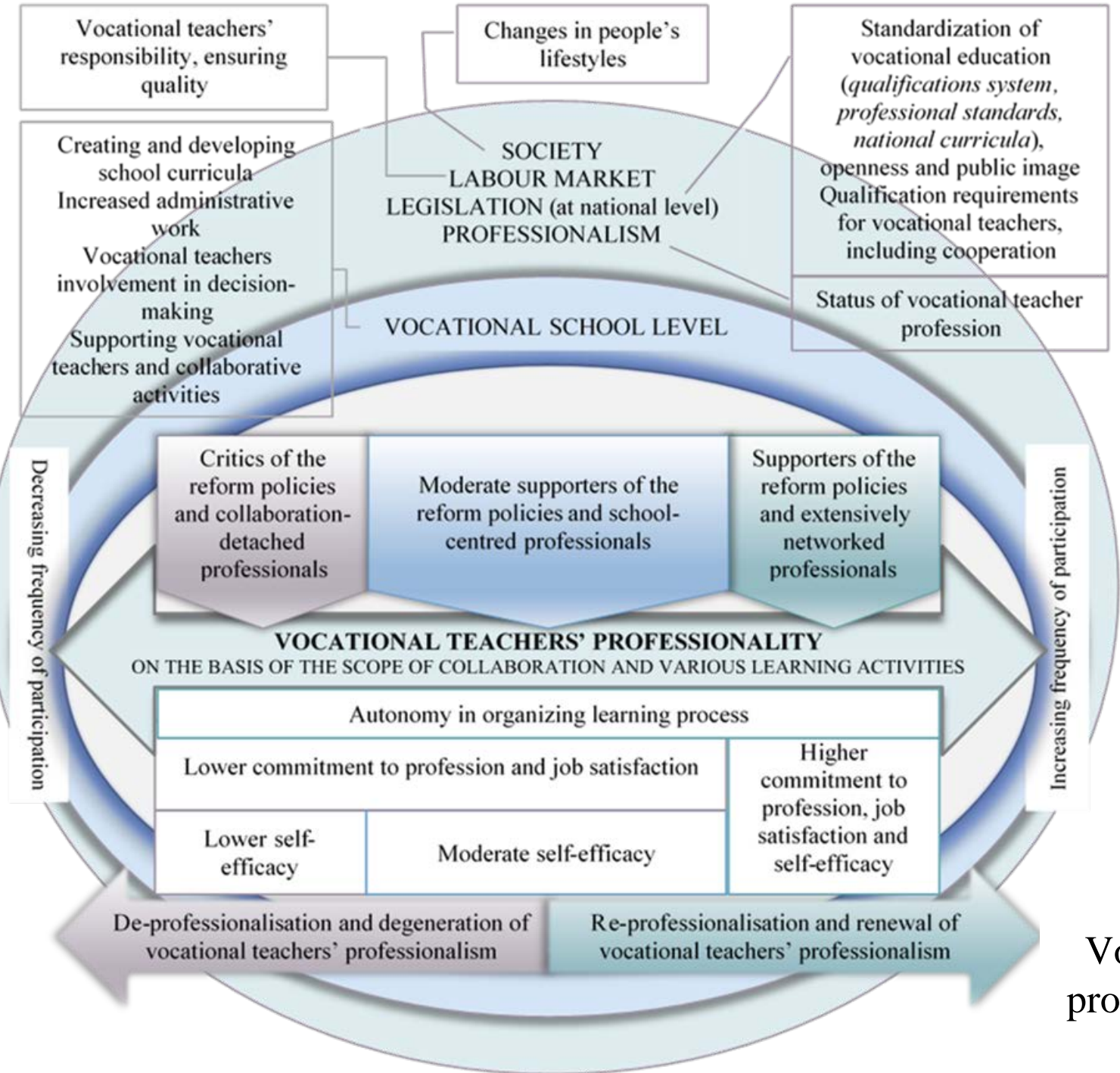| Variable | I cluster 27% Extensively networked professionals | II cluster 28% Collaboration-detached professionals | III cluster 45% School-centred professionals |
|---|---|---|---|
| Professional collaboration and self-development in the school | 2,11[II and III] | 1,47[I and III] | 1,87[I and II] |
| Collaborative curriculum development and teaching at school | 2,56[II and III] | 1,85[I and III] | 2,32[I and II] |
| Preserving the autonomy in organization of classroom work | **3,55[III]** | **3,55[III]** | 3,30[I and II] |
| Participation and learning in network outside the school | 3,15[II and III] | 1,81[I and III] | 2,40[I and II] |
| Professional development outside the school | 3,02[II and III] | 1,61[I and III] | 2,32[I and II] |
| Participation and learning in project work | 2,98[II and III] | 1,24[I and III] | 2,20[I and II] |
| Participation and learning in formal training and collaboration based on research work | 2,66[II and III] | 1,81[I and III] | 2,22[I and II] |
| Increased opportunities to have a say in school management | 3,42[II and III] | 2,59[I and III] | 2,92[I and II] |
| I feel that I influence student life through the education | 3,52[II and III] | **3,07[I]** | **2,99[I]** |

First two variables were measured on the 3-points scale, others variables were 4-points scale; On each mean of variable of the cluster has been marked the cluster(s) which differ statistically significance ($p < 0,05$) based on Bonferroni test.

# Differences between the clusters in terms of work satisfaction and perceptions of the status of VTs

| Variable | M/ SD | I cluster 27% | II cluster 28% | III cluster 45% | p |
|---|---|---|---|---|---|
| If I could decide again, I would still choose to work as vocational teacher | M | **3,09**(II and III)* | 2,78(I)* | 2,86(I)* | 0,00 |
| | SD | 0,73 | 0,85 | 0,74 | |
| I am satisfied with my performance in this school. | M | **3,22**(II and III)* | 2,97(I)* | 3,08(I)* | 0,00 |
| | SD | 0,56 | 0,53 | 0,45 | |
| All in all, I am satisfied with my job | M | **3,27**(II and III)* | 3,03(I)* | 3,12(I)* | 0,00 |
| | SD | 0,59 | 0,65 | 0,50 | |
| I think that the teaching profession is valued in society | M | 2,21 | 2,01 | 2,16 | 0,09 |
| | SD | 0,90 | 0,82 | 0,71 | |

Opinion was given 4-points scale1 (strongly disagree) to 4 (strongly agree)
*Statistical significant between the clusters based on Bonferroni test (p < 0,05)

Vocational teachers' responsibility, ensuring quality

Changes in people's lifestyles

Standardization of vocational education (*qualifications system, professional standards, national curricula*), openness and public image Qualification requirements for vocational teachers, including cooperation

Creating and developing school curricula
Increased administrative work
Vocational teachers involvement in decision-making
Supporting vocational teachers and collaborative activities

SOCIETY
LABOUR MARKET
LEGISLATION (at national level)
PROFESSIONALISM

Status of vocational teacher profession

VOCATIONAL SCHOOL LEVEL

Decreasing frequency of participation

Increasing frequency of participation

Critics of the reform policies and collaboration-detached professionals

Moderate supporters of the reform policies and school-centred professionals

Supporters of the reform policies and extensively networked professionals

**VOCATIONAL TEACHERS' PROFESSIONALITY**
ON THE BASIS OF THE SCOPE OF COLLABORATION AND VARIOUS LEARNING ACTIVITIES

Autonomy in organizing learning process

Lower commitment to profession and job satisfaction

Higher commitment to profession, job satisfaction and self-efficacy

Lower self-efficacy

Moderate self-efficacy

De-professionalisation and degeneration of vocational teachers' professionalism

Re-professionalisation and renewal of vocational teachers' professionalism

Vocational teacher professionality (Sirk, 2020)

# Conclusions and the practical implications of these findings for the training of VTs

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# Conclusions and the practical implications of these findings for the training of VTs (Sirk, 2020)

- ✓ Standardisation has generally been portrayed as negative in the work of general education teachers (e.g. Hoyle & Wallace, 2009; Torres & Weiner, 2018; Wermke & Höstfält, 2014), but the experience of VTs in Estonia suggests that to some extent standardisation has helped their work.

- ✓ Excessive and hasty standardisation and/or reform creates negative attitudes, as it does not allow for debate and deeper analysis, and the substantive need for change is not understood. This concern was also highlighted by Finnish VTs (Vähäsantanen, 2015; Vähäsantanen & Eteläpelto, 2009, 2011).

- ✓ VTs consider collaboration in professional self-development and the implementation of a qualification system as the most important developments in VET. However, changes in the assessment and qualification of their work are seen as the least important.

- ✓ VTs have expressed different perceptions, evaluations and experiences of the changes in VET, and different forms of collaboration and learning activities have been used to adapt to the changes, which together shape the professionality of VTs.

- ✓ Collaboration as an essential factor that determines Estonian VTs' professionality

# Conclusions and the practical implications of these findings for the training of vocational teachers (Sirk, 2020)

- ✓ Three profiles of VT professionality have emerged: 1) supporters of the reform policies and extensively networked professionals; 2) moderate supporters of the reform policies and school-centred professionals, and 3) critics of the reform policies and collaboration-detached professionals.

- ✓ VTs' collaborative practices have become a universal way of responding and adapting to changes and demands in VET. These collaborative practices <u>also influence their self-efficacy, job satisfaction and commitment to the profession</u>, and these are <u>important determinants of vocational teachers re-professionalisation and retention in the profession</u>.

  - ▪ The wider scope of VT collaboration fosters more positive attitudes, satisfaction and commitment to their work and profession.

  - ▪ VTs with higher self-efficacy are better able to cope in demanding pedagogical situations and with new tasks and roles in a changing context, which is supported by the scope of collaborative learning activities inside and outside school.

  - ▪ Collaborative activities help to make sense of changes in the professionality of VTs.

  - ▪ The results indicated that lower commitment to the profession and job satisfaction as well as a more critical attitude towards change lead to de-professionalization.

✓ The willingness of VTs to cultivate students depends on their higher self-efficacy, commitment to the profession and the extent of collaboration.

✓ It is necessary to support and encourage collaboration between VTs both inside and outside schools as well as collaborative initiatives from the VTs themselves, which would increase their willingness to take responsibility for their professionality, and thereby develop their professionalism.

✓ It is important that VET institutions create a collaborative learning culture within the organisation, and thereby support the continued professionalisation of VTs

✓ According to a recent study which was contacted after the state of emergency caused by the Covid-19, VTs who collaborated more frequently with their colleagues more often applied (Sirk, 2023):
  - ✓ Teaching methods based on constructivist teaching principles.
  - ✓ Teaching activities which supported students learning.
  - ✓ Those teaching practices which required better digital competences.

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Thank you for your attention!

Questions and discussion

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