THE ROLE OF REGIONAL "ADVANCED VOCATIONAL MASTERY TECHNICUMS" IN IMPROVING THE QUALIFICATIONS OF PEDAGOGICAL CADRES BASED ON THE CLUSTER MODEL

Xudayberdiyev Zayniddin
Director of the Institute for Professional Education Development,
Doctor of Economic Sciences, Professor

Abstract
This article analyzes the activities of the new institutional structure – "Advanced Vocational Mastery Technicums" (Advanced Professional Skill Colleges), introduced in the vocational education system in accordance with the Resolution of the President of the Republic of Uzbekistan No. PQ-316 dated October 23, 2025. It scientifically substantiates the function of these technicums, established in the regions, as an educational cluster center (Hub) serving as a leading practical base for other technicums in the region. Furthermore, the article elucidates new mechanisms that ensure the integration of resource efficiency and educational quality in improving the qualifications of production training masters.

Keywords: Vocational education reform, PQ-316, advanced vocational mastery technicum, educational cluster, master of production training, practical base, teacher qualification improvement.

Introduction

The development of human capital and the improvement of the personnel training system aligned with labor market requirements in Uzbekistan have reached a new stage. In particular, the Decree of the President of the Republic of Uzbekistan No. PF-190 "On Measures to Improve Management Efficiency in the Vocational Education System" and the Resolution No. PQ-316 "On Measures to Implement Reforms in the Vocational Education System", both dated October 23, 2025, marked the beginning of a radical transformation period in the sector [1,2].

One of the most significant aspects of these documents is the concept of efficient resource utilization and quality centralization in vocational education. According to Resolution No. PQ-316, it was determined to establish 14 "Advanced Vocational Mastery Technicums" within the system of the Agency for Vocational Education, based on the driver sectors of each region [2].

The introduction of this new structure is a vivid example of the implementation of the "Cluster Model" in pedagogy. In this model, the advanced technicum becomes a center of modern technologies and methodologies for all other vocational education institutions in the region. This approach serves as a systemic solution to the problems observed in previous years, such as the scattering of the material-technical base and the overly theoretical nature of the qualification improvement system.

Web of Discoveries: Journal of Analysis and Inventions
webofjournals.com/index.php/3

Main Body

The Theoretical and Practical Necessity of the Cluster Approach in VET. The modernization of the vocational education system in Uzbekistan necessitates a fundamental transition from a fragmented, institution-centric approach to a networked, resource-integrated model. In the context of the Fourth Industrial Revolution, the rapid obsolescence of technological equipment and manufacturing processes makes it economically unfeasible to equip every single vocational institution with cutting-edge technology. Consequently, the establishment of "Advanced Vocational Mastery Technicums" (AVMTs) represents a strategic shift towards a Hub-and-Spoke Cluster Model. According to the Presidential Resolution No. PQ-316, the creation of these advanced institutions is not merely an infrastructural upgrade but a restructuring of the pedagogical supply chain. The cluster model centralizes high-cost resources—such as advanced laboratories, workshops, and highly qualified master trainers—into a single regional hub, while satellite institutions utilize these resources via academic and practical mobility. This approach addresses the chronic issue of resource disparity between urban centers and remote districts, ensuring that the standardization of professional competencies is achieved across the entire national territory [2].

Infrastructure Integration: The "Resource Hub" Concept. The primary function of the AVMTs within the new cluster ecosystem is to serve as a "Leading Practical Base." The resolution explicitly mandates the establishment of 14 such technicums—one in the Republic of Karakalpakstan, one in Tashkent city, and one in each region. These institutions are designed to be equipped with modern laboratory and workshop equipment tailored to the specific mid-level personnel needs of their respective regions. This regional specialization allows for a targeted investment strategy, optimizing public spending by concentrating capital-intensive resources where they are most needed.

To operationalize this concept, a robust investment program has been outlined for the 2026–2030 period. The resolution defines a comprehensive roadmap for the construction, reconstruction, and capital repair of these facilities. The detailed program for 2026-2027 allocates resources for the construction and repair of educational buildings and workshops, specifically targeting capacity increases in student dormitories to support the influx of visiting students and educators. This physical transformation is a prerequisite for the AVMTs to function as "Resource Hubs," capable of hosting external stakeholders without disrupting their internal educational processes. A critical innovation in this model is the mandate that AVMTs serve as the primary practical training site for other technicums in the region. This shared-resource mechanism significantly increases the return on investment for educational assets and ensures that students from less developed districts have access to the same quality of training infrastructure as those in regional centers [2].

A New Paradigm for Improving Pedagogical Qualifications. The most profound pedagogical shift introduced by the resolution is the restructuring of the qualification improvement system for Masters of Production Instruction. Historically, teacher training often suffered from a disconnect between theoretical pedagogy and actual industrial practice. The

new decree addresses this by relocating the qualification improvement process directly into the production environment of the AVMTs. This signifies a move towards Work-Based Learning (WBL) for educators, where the qualification improvement of masters is carried out within the current operational activities of the advanced technicums. The Institute for Professional Education Development retains the role of the methodological coordinator, organizing these courses to ensure academic rigor [4].

To further elevate the quality of human capital, the resolution introduces a meritocratic mechanism for international development. Annually, the top 50 masters of production instruction, along with general and special subject teachers who show the best results during the qualification improvement process, will be sent abroad for training funded by the Vocational Education Development Fund. This creates a competitive environment that incentivizes excellence, with the knowledge gained from international internships subsequently disseminated back through the cluster network.

Status, Incentives, and Financial Autonomy. Crucially, the success of the AVMTs depends on the caliber of their permanent staff. To attract the best talent to these "Hub" institutions, the resolution elevates their status. The financing of AVMT activities and the remuneration conditions for their employees are aligned with the standards set for "Creative Schools" under the Agency for Specialized Educational Institutions. This implies higher salary scales and better working conditions, positioning the AVMTs as elite institutions within the vocational sector. Furthermore, directors are granted the autonomy to establish monthly allowances and supplements based on labor market conditions, with the authority to set salaries up to 15 times the minimum wage for high-performing staff. This financial autonomy is essential for retaining experts who might otherwise leave for the private sector [6].

Logistic and Social Support Mechanisms for Mobility. A cluster model is only as effective as the mobility it permits. If logistical barriers prevent masters and students from peripheral areas from accessing the hub, the system fails. Recognizing this, the resolution institutionalizes a comprehensive social support framework to facilitate the rotation of personnel and learners. It mandates that students and staff from other technicums who come to the AVMTs for practical training or qualification improvement are provided with free accommodation, food, and transportation. This is a critical equity measure that removes the financial burden from the individual and the sending institution.

The decree provides specific financial metrics for this support, allocating funds equivalent to 15 percent of the Base Calculation Amount (BCA) per person per day for food expenses. Additionally, transportation services are not burdening the educational administration but are organized via outsourcing. These provisions create a "frictionless" environment for academic mobility, allowing the cluster to function as a single, cohesive organism rather than a collection of isolated schools.

Alignment with National Strategic Goals. The establishment of AVMTs is intrinsic to meeting the ambitious Key Performance Indicators (KPIs) set for 2030. The resolution aims to

increase the proportion of masters of production instruction with professional certificates to 30 percent. The AVMTs act as the primary engine for achieving this metric by centralizing the certification and training process in high-quality environments. Furthermore, these advanced technicums are instrumental in the goal of increasing the coverage of 9th-grade graduates in vocational education to 50 percent. By raising the prestige of vocational education through modern facilities and highly skilled instructors, these institutions serve as a testament to the state's commitment to developing a competent and competitive workforce [5].

Conclusion

The establishment of "Advanced Vocational Mastery Technicums" (AVMTs), as stipulated in the Presidential Resolution No. PQ-316, marks a definitive transition from extensive to intensive development in Uzbekistan's vocational education system. The analysis of the cluster model implemented through these institutions leads to the following conclusions regarding its role in improving the qualifications of pedagogical cadres:

Firstly, the AVMTs function as **regional competence hubs**, effectively solving the dilemma of resource scarcity. By concentrating high-tech equipment and creating a centralized practical base, the state ensures that the modernization of infrastructure directly translates into pedagogical quality, avoiding the inefficiencies of fragmented capital investment.

Secondly, the introduction of the **dual-cluster mechanism** for teacher training fundamentally alters the professional development trajectory for masters of production instruction. Shifting qualification improvement from theoretical centers to the production floors of AVMTs ensures that educators possess up-to-date industrial skills. This is further reinforced by the merit-based system that selects the top performing masters for international internships, thereby integrating global best practices into the local curriculum.

Thirdly, the model creates a **barrier-free educational environment**. The provision of state-funded logistics (accommodation, nutrition, and transport) for visiting students and staff guarantees that the benefits of the cluster are distributed equitably across the region, regardless of the geographic location of the satellite technicums.

Finally, the elevation of the AVMTs' status to that of "Creative Schools," coupled with the financial autonomy granted to directors, provides the necessary management levers to attract and retain top-tier talent. This institutional reform is critical for achieving the strategic goal of increasing the coverage of 9th-grade graduates in vocational education to 50 percent by 2030.

In summary, the AVMT-based cluster model offers a sustainable, scalable, and quality-oriented framework for the continuous professional development of pedagogical cadres, ensuring the vocational education system is aligned with the dynamic requirements of the national economy.

References

1. Decree of the President of the Republic of Uzbekistan. (2025). On Measures to Improve Management Efficiency in the Vocational Education System (No. PF-190). Tashkent.
2. Resolution of the President of the Republic of Uzbekistan. (2025). On Measures to Implement Reforms in the Vocational Education System (No. PQ-316). Tashkent.

3. Decree of the President of the Republic of Uzbekistan. (2024). On Measures to Further Improve the System of Training Qualified Personnel in Vocational Education and Introduce International Educational Programs (No. PF-158). Tashkent.
4. Resolution of the President of the Republic of Uzbekistan. (2019). On Measures to Introduce New Management Principles into the System of Higher and Secondary Specialized Education (No. PQ-4391). Tashkent.
5. Resolution of the President of the Republic of Uzbekistan. (2024). On Measures to Further Improve the National Qualifications System of the Republic of Uzbekistan (No. PQ-345). Tashkent.
6. Porter, M. E. (1998). Clusters and the New Economics of Competition. Harvard Business Review, 76(6), 77-90.
7. UNESCO. (2022). Transforming Technical and Vocational Education and Training (TVET) for successful and just transitions. Paris: UNESCO.

Web of Discoveries: Journal of Analysis and Inventions
webofjournals.com/index.php/3