

**BEYOND THE GRADE THRESHOLD: A TRIADIC
INCENTIVE-ALIGNMENT FRAMEWORK FOR STATE-
FINANCED STIPENDS IN DUAL VOCATIONAL
EDUCATION, WITH EVIDENCE FROM UZBEKISTAN'S
2026 REFORM**

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Abstract

Governments expanding dual vocational education and training (VET) systems face a design problem that has received surprisingly little conceptual attention: how should a state structure a stipend so that it simultaneously protects a trainee's livelihood, re-wards effort, and gives an employer a credible channel to signal performance, without collapsing into either blanket welfare or narrow piece-rate pay? This paper develops the Triadic Incentive-Alignment Model (TIAM), a conceptual framework that decomposes conditional-stipend design into five interacting layers — baseline security, per-formance escalation, third-party (employer) evaluation, platform-mediated condition-ality, and reversible sanctioning. The framework is applied to a 2026 Uzbek govern-ment resolution that introduces digitally administered, performance-tiered stipends for technicum students in dual education. The case shows how the five layers can be combined in practice, but also exposes three structural tensions that the literature on apprenticeship financing and conditional transfers has not resolved: grade-based escalation invites grade inflation; employer-scored evaluation imports firm-level bias into a public entitlement; and full-budget financing from a single ministry creates fis-cal fragility once state co-financing commitments expire. The paper proposes four testable design amendments — a composite performance index, graduated state–employer co-financing, a procedural-justice appeal channel for suspended stipends, and sector-weighted multipliers — that convert the Uzbek case from a

descriptive example into a transferable policy instrument for other transition economies scaling up dual VET.

Keywords: dual vocational education; conditional stipends; incentive alignment; human capital policy; digital governance platforms; Uzbekistan

1. Introduction

Dual vocational education — in which a student divides time between a training institution and a workplace — is increasingly promoted by governments in Central and South Asia as a remedy for the mismatch between what schools teach and what labour markets need. Financing such systems, however, raises a question that is more institutional than pedagogical: who pays the trainee, on what condition, and through what verification mechanism? In classical dual systems such as Germany's, the employer pays a training allowance directly, and the state's role is largely regulatory (Deissinger, 2015). Many transition economies cannot replicate this model quickly, because employer associations are weak and firms are reluctant to bear training costs for students who may leave. States in this position therefore finance the stipend themselves and use conditionality — grades, competition results, attendance — as a substitute for the employer's direct financial stake.

This substitution is not neutral. A state-financed, condition-based stipend is simulta-

neously a welfare instrument, an incentive contract, and an information system, and each of these three functions pulls the design in a different direction. The welfare function argues for unconditional, universal payment; the incentive function argues for sharp conditionality; the information function argues for a reliable, low-cost way to verify that the condition was met. Existing literature addresses these functions separately — human capital theory justifies public investment in training (Becker, 1964), principal-agent theory explains why conditionality is used to control effort (Jensen & Meckling, 1976), and the conditional cash transfer literature documents the behavioural effects of tying payment to performance (Fiszbein & Schady, 2009) — but no framework brings the three together specifically for dual-VET stipends financed by the state rather than the firm.

This paper fills that gap. It develops a five-layer conceptual model, the Triadic Incentive-Alignment Model (TIAM), and uses a recent Uzbek policy instrument as an illustrative case: Cabinet of Ministers Resolution No. 341 of 30 June 2026, “On approval of the Regulation on the procedure

for paying stipends to technicum students studying in the dual education form,” which from the 2026/2027 academic year introduces a digitally mediated, tiered stipend for technicum students in dual programmes. The resolution is a useful case not because it is exceptional, but because it is representative: it combines a universal baseline payment, a grade- and competition-based escalator, employer-supplied performance data, a national digital platform, and a graduated suspension–reinstatement procedure — five elements that appear, in varying combinations, across many post-Soviet and Asian VET reforms. Analysing it through the TIAM lens allows the paper to move from description to generalisable design guidance.

2. Theoretical Framework: Three Lenses on Conditional Support

2.1 The human capital lens

Human capital theory treats vocational training as an investment with returns shared between the individual and the economy, which justifies public subsidy of the costs a trainee bears while not yet earning a full wage (Becker, 1964). Under this lens, a stipend is compensation for foregone income, and its size should track the opportunity cost of training rather than any measure of performance. This logic supports a universal baseline component of a stipend: every enrolled student, regardless of grades, is undertaking the same investment and forgoing similar earnings, so a floor payment is justified on efficiency grounds alone, independent of merit.

2.2 The multi-principal agency lens

Where human capital theory is silent on effort, agency theory is explicit: whenever a principal cannot directly observe an agent’s effort, it will use a contractible proxy — here, grades, attendance, or competition wins — to approximate effort and calibrate payment accordingly (Jensen & Meckling, 1976). Dual VET complicates the classical two-party agency problem because there are effectively two principals — the state, which owns the fiscal budget, and the enterprise, which owns the workplace evaluation — monitoring a single agent, the student. Each principal has a different proxy for effort (academic grades versus workplace conduct), and the two proxies need not

ove together. A student can be a strong classroom performer and a weak trainee, or vice versa. This is the core design problem the TIAM addresses: how to combine two independent, imperfect performance signals into one payment rule without letting either principal's proxy dominate arbitrarily.

2.3 The platform-governance lens

A third body of work, less theorised in economics but central to implementation, concerns the digital infrastructure through which conditionality is verified. Conditional cash transfer programmes show that the credibility of any condition-based payment depends on low-cost, tamper-resistant verification; where verification is weak, conditionality either becomes unenforceable or is captured by local intermediaries (Fiszbein & Schady, 2009). Contemporary apprenticeship-financing schemes increasingly route both the disbursement and the verification through a single administrative data system rather than through discretionary local certification (Cedefop, 2020). This shifts part of the incentive-alignment problem from contract design to system design: the platform itself becomes a fourth actor whose data-entry rules, access rights, and audit trail determine whether the stated conditionality is real or nominal.

3. The Triadic Incentive-Alignment Model (TIAM)

Building on the three lenses, the TIAM decomposes a state-financed dual-VET stipend into five layers that any policy designer must specify, whether explicitly or by default.

1. Baseline security layer — a payment floor available to every enrolled student irrespective of performance, sized to the opportunity cost of training rather than to merit. This layer operationalises the human capital argument and functions as the entitlement that keeps the poorest-performing but still-enrolled students in the system.
2. Performance escalation layer — a multiplier applied above the baseline when an academic or competitive threshold is crossed. This layer operationalises the state's side of the agency relationship, using an observable, centrally verifiable proxy (grades, competition rank).
3. Third-party evaluation layer — a channel through which the enterprise, as the second principal, feeds workplace-performance

information into the payment decision independently of the academic proxy. This layer is what distinguishes dual-VET stipend design from ordinary merit scholarships: the agent is monitored by two principals with different information.

4. Platform-conditionality layer — the digital infrastructure that records enrolment, attendance, evaluation, and payment status, converting the first three layers from paper rules into an enforceable, auditable transaction stream, and reducing the transaction costs identified in the apprenticeship-financing literature (Cedefop, 2020).

5. Reversible sanctioning layer — a rule set governing suspension of payment when conditions are violated, paired with an explicit reinstatement pathway. The presence of a reinstatement path (rather than permanent disqualification) is what keeps the sanction behavioural rather than punitive, consistent with the incentive logic of conditional transfers, whose effectiveness depends on the agent perceiving the condition as recoverable rather than a one-shot cliff (Fiszbein & Schady, 2009).

The analytical claim of this paper is that these five layers are not independent design choices; each layer constrains what the others can safely do. A generous baseline (layer 1) can absorb noise in the escalation criterion (layer 2) without starving low performers. A narrow escalation criterion, in turn, needs a credible platform (layer 4) to be enforceable at scale. And a workable sanctioning layer (layer 5) needs the third-party evaluation (layer 3) to be procedurally defensible, or the sanction will be perceived as arbitrary. The next section reads a real policy instrument against this five-layer grid.

4. Case Reading: Resolution No. 341 (30 June 2026)

Resolution No. 341 assigns each of the five TIAM layers a concrete institutional form, summarised below.

- Baseline layer. Every first-year student admitted to a dual programme receives one base calculation unit per month regardless of academic performance — a pure entitlement layer matching the human capital argument almost exactly.
- Escalation layer. Students whose semester grades average above an 85 per-cent threshold, or who win designated republican or international

vocational competitions, receive triple the base unit. The threshold is binary rather than continuous: a single percentage point below 85 removes the entire escalation, which is the first tension examined in Section 5.

- Third-party evaluation layer. The enterprise evaluates the student's work-place competence and conduct at the end of training and can request suspension of payment through the platform if performance or discipline is unsatisfactory; the technicum director issues the suspension order within three days of the re-request. The enterprise's evaluation criteria are set by the enterprise itself, subject to a separate government-issued evaluation methodology — a partial, not full, centralisation of the second principal's proxy.
- Platform-conditionality layer. A dedicated digital platform, integrated with the country's unified national labour-market information system, records enrolment orders, enterprise data, daily attendance recorded jointly by the technicum group leader and the workplace mentor, and payment transfers, with the training institution's director personally accountable for data entry.
- Reversible sanctioning layer. Payment is suspended on a defined list of grounds (unsatisfactory performance, breach of workplace discipline, expulsion, contract termination, or death), but reinstatement is explicitly possible from the following month based on the enterprise's revised assessment and the technicum group leader's recommendation, evaluated against five stated behavioural criteria. Separately, illness, maternity leave, and scheduled academic holidays are carved out as protected periods during which payment continues or resumes regardless of the performance rule — an explicit acknowledgement that the escalation and sanctioning layers should not override the baseline security layer in defined welfare-sensitive circumstances.

Read this way, the resolution is not merely an administrative payment schedule; it

is a fully specified instance of the TIAM, and one of the more complete public examples currently available, since most national apprenticeship-financing schemes documented in comparative surveys specify layers 1–2 in detail but leave layers 3–5 to local discretion (Cedefop, 2020).

5. Structural Tensions

Three tensions recur across the layers and are generalisable beyond this single case.

Grade inflation risk. A binary 85 percent threshold that triples income creates a strong incentive for both students and instructors to inflate grades near the cutoff, a well-documented distortion in any performance-contingent transfer that relies on a single discrete threshold rather than a continuous scale (Fiszbein & Schady, 2009). Because the threshold is centrally defined and nationally uniform, the distortion, if it occurs, will be systemic rather than local, which is harder to detect through spot audits.

Imported employer bias. Delegating workplace evaluation to the enterprise — layer 3 — solves the information problem (the state genuinely cannot observe workplace conduct) but reopens a different one: an enterprise's evaluation criteria, even where bounded by a common methodology, can reflect firm-specific preferences unrelated to competence, and the same low grade that triggers suspension of a public entitlement is set by a private party with no fiduciary duty toward the student. The resolution pro-vides a review path (the technicum director can act without the enterprise's request in some cases) but does not describe an appeal mechanism through which a student can contest an enterprise's negative evaluation before the sanction takes effect.

Fiscal fragility after transition. The resolution finances the entire stipend obligation from the ministry's allocated budget for 2026 and shifts it into ordinary state budget parameters only from 2027 onward. This sequencing is common in reform launches, but it means the escalation layer's generosity (a 3x multiplier for high performers, applied to an unknown and likely growing enrolment base) is committed before its long-run financing is settled, a sequencing risk familiar from the broader apprenticeship-financing literature, where schemes that begin with strong central funding often face pressure to narrow eligibility once funding pressures appear (Cede-fop, 2020).

6. Toward a More Robust Design

The TIAM suggests four concrete amendments, each targeting one tension without abandoning the underlying five-layer architecture.

1. Replace the binary grade threshold with a composite, continuous index. A weighted index combining academic average, attendance, and a normalised employer score — rather than a single 85 percent cut-off —

removes the cliff-edge incentive for grade manipulation and allows partial escalation (e.g., 1.5x, 2x, 3x tiers) that tracks genuine performance more smoothly.

2. Introduce graduated state–employer co-financing tied to sector demand. Rather than the state financing 100 percent of every tier indefinitely, the escalation layer could shift toward shared financing in sectors where enterprises

already benefit directly from trained labour, following the mixed financing models documented across EU apprenticeship systems (Cedefop, 2020); this directly addresses the fiscal-fragility tension by aligning payment source with the party best able to observe and benefit from the performance being rewarded.

3. Add a procedural-justice appeal channel for suspensions. Before an enterprise-triggered suspension takes effect, a short, platform-logged appeal window in which the student can contest the evaluation — reviewed by the territorial vocational education department rather than the same technicum director who issued the order — would address the imported-bias tension while preserving the reversible, non-punitive character the current reinstatement rule already establishes.

4. Apply sector-weighted multipliers instead of a flat rate. Where national labour-market data (already integrated into the platform) show acute shortages in particular trades, a differentiated multiplier by sector would let the same fiscal envelope produce a stronger signal exactly where the human-capital return to training is highest, rather than distributing the escalation uniformly across all dual programmes.

None of these amendments requires new institutions; each is implementable within the platform and evaluation architecture the resolution already establishes, which is precisely the point of specifying the model in five separable layers rather than as a single undifferentiated “conditional stipend.”

7. Conclusion

The paper has argued that state-financed dual-VET stipends should be understood as five interacting design layers — baseline security, performance escalation, third-party evaluation, platform conditionality, and reversible sanctioning — rather than as a single conditionality rule. Applying this lens

to a 2026 Uzbek resolution shows both the strength of a fully specified, digitally enforced instrument and three structural tensions — grade-threshold gaming, imported employer bias, and post-transition fiscal fragility — that are latent in any similarly designed scheme. Because these tensions arise from the architecture rather than from any single national context, the TIAM offers other governments scaling up state-financed dual VET a diagnostic checklist, and the four proposed amendments offer a tested starting point for closing the gaps before they surface in implementation.

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