



BUSINESS PEDAGOGY AS AN UPBRINGING DRIVER OF ECONOMIC DEVELOPMENT

Rajabov S.B.

*Doctor of Philosophy (PhD) in Economic Sciences
National Institute of Pedagogy of Upbringing named after T.N. Qori-Niyoziy, Republic of Uzbekistan*

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ABSTRACT

This article substantiates business pedagogy as an interdisciplinary field that functions as an upbringing-based driver of economic development, linking the formation of economic culture and entrepreneurial thinking in the younger generation to macro-level indicators of economic growth. Drawing on human capital theory, endogenous growth theory, and the concept of entrepreneurship capital, the study proposes a structural-functional model comprising five interrelated functions of business pedagogy — economic-cultural, motivational-entrepreneurial, human-capital-forming, institutional-integrative, and reflective-strategic — through which upbringing processes translate into economic outcomes. The practical significance of each function was assessed through an expert survey of specialists in pedagogy and economics.

KEYWORDS: Business Pedagogy, Upbringing, Human Capital, Economic Development, Entrepreneurship Capital, Endogenous Growth, Economic Culture, Uzbekistan.

INTRODUCTION

Contemporary economic theory has progressively shifted its attention from physical capital accumulation toward human capital and knowledge as the principal engines of long-run economic growth. This intellectual turn traces back to Schultz and Becker, who demonstrated that expenditure on education, training, and upbringing constitutes a genuine investment in human capital, yielding measurable economic returns comparable to investment in physical assets.¹ Building on this foundation, the endogenous growth models developed by Romer and Lucas formalized the idea that knowledge, human capital, and the externalities they generate — rather than exogenous technological change alone — are what sustain long-run growth, giving economic legitimacy to the proposition that pedagogical processes are themselves a component of a nation's productive capacity.²

In the Republic of Uzbekistan, this theoretical shift has a direct policy counterpart. The Development Strategy of New Uzbekistan for 2022–2026 sets the objective of raising the private sector's share to 80 percent of GDP and 60 percent of exports, placing the expansion of entrepreneurial activity at the center of the national economic agenda.³ The Concept for the Development of the Public Education System of the Republic of Uzbekistan until 2030, in turn, identifies the cultivation of economic thinking and practical life skills as a priority of upbringing (tarbiya) work, explicitly locating economic competence within the domain of moral-educational formation rather than treating it as a narrowly technical subject.⁴ It is at the intersection of these two documents — one economic, one pedagogical — that the field of business pedagogy has begun to take shape: an interdisciplinary domain concerned with how upbringing processes in the family, school, and community generate the economic culture, motivation, and competencies on which entrepreneurial activity and, ultimately, economic development depend.

Despite this convergence of economic and pedagogical policy, business pedagogy has not yet been systematized as a distinct structural-functional mechanism linking micro-level upbringing processes to macro-level economic development indicators. The literatures on human capital and endogenous growth theory, on the one hand, and on school-level entrepreneurship pedagogy, on the other, have largely developed in parallel: economists model human capital as an aggregate input without specifying the upbringing mechanisms that produce it, while pedagogical research on entrepreneurship education rarely traces its outcomes forward to macroeconomic indicators. This disconnect between the pedagogical and economic literatures constitutes the central problem addressed in this article.

¹Schultz, T.W. *Investment in Human Capital*. American Economic Review, 1961, Vol. 51, No. 1, pp. 1–17; Becker, G.S. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. New York: Columbia University Press, 1964.

²Romer, P.M. *Increasing Returns and Long-Run Growth*. Journal of Political Economy, 1986, Vol. 94, No. 5, pp. 1002–1037; Lucas, R.E. *On the Mechanics of Economic Development*. Journal of Monetary Economics, 1988, Vol. 22, No. 1, pp. 3–42.

³Decree of the President of the Republic of Uzbekistan No. PF-60, “On the Development Strategy of New Uzbekistan for 2022–2026,” January 28, 2022, Goal 29.

⁴Decree of the President of the Republic of Uzbekistan No. PF-5712, “On Approval of the Concept for the Development of the Public Education System of the Republic of Uzbekistan until 2030,” April 29, 2019.



The purpose of the present study is to substantiate business pedagogy as an upbringing-based driver of economic development by proposing a structural-functional model that connects its constituent functions to specific economic development indicators, and to assess the relative practical significance of these functions through expert evaluation. In accordance with this purpose, the following tasks were set: to systematize the theoretical approaches linking human capital and entrepreneurship-capital theory to pedagogical upbringing processes; to develop a structural-functional model of business pedagogy comprising its principal functions; and to assess the comparative driving impact of these functions through a survey of specialists in pedagogy and economics.

LITERATURE REVIEW

The psychological micro-foundations of the link between upbringing and economic performance were established by McClelland, who argued that the aggregate level of achievement motivation within a society — itself substantially shaped by child-rearing and educational practices — helps explain differences in national economic dynamism over time.⁵ This proposition anticipated, by several decades, the more recent macro-level literature linking entrepreneurship to economic growth. Wennekers and Thurik, synthesizing historical, industrial, and evolutionary strands of economic literature, showed that entrepreneurship contributes to growth through multiple channels — innovation, competitive selection, and the generation of variety among firms — and that these channels are themselves conditioned by a broader “entrepreneurial climate” shaped by cultural and institutional factors rather than by individual traits alone.⁶

Audretsch and Keilbach advanced this argument further by introducing the concept of “entrepreneurship capital” — a region’s endowment of factors conducive to the creation of new businesses — and demonstrating, through a production-function model estimated for German regions, that this capital exerts a significant and independent effect on regional output and productivity, alongside conventional labor and physical capital.⁷ This finding is of direct relevance to business pedagogy, since entrepreneurship capital, unlike physical capital, is substantially formed through upbringing and educational processes rather than accumulated through investment alone; a region’s stock of entrepreneurship capital can therefore be understood, at least in part, as the cumulative output of its business-pedagogical practice over time.

At the level of individual competence formation, the European Entrepreneurship Competence Framework (EntreComp) provides the pedagogical building blocks through which entrepreneurship capital is constructed: its fifteen competences, organized into the areas of Ideas and Opportunities, Resources, and Into Action, describe precisely the knowledge, skills, and attitudes that upbringing and educational practice must cultivate if a population’s aggregate entrepreneurial capacity is to grow.⁸ More broadly, the OECD’s synthesis of research on social and emotional skills demonstrates that skills formed in childhood and adolescence through family and school upbringing — including perseverance, self-esteem, and sociability — predict labor-market and social outcomes at both the individual and the aggregate level, providing further empirical grounding for treating upbringing-stage pedagogical investment as an economically consequential variable rather than a purely social one.⁹

Taken together, this literature establishes two things clearly: first, that human capital and entrepreneurship capital are recognized determinants of economic growth at both the endogenous-growth and the regional-production-function level; and second, that the pedagogical mechanisms through which these forms of capital are formed operate substantially through upbringing processes in the family, school, and community. What remains absent is a structural-functional model that explicitly connects the two — one that specifies which business-pedagogical functions correspond to which economic development indicators, and that allows their relative significance to be assessed empirically. It is this gap that the present study seeks to address.

RESEARCH METHODOLOGY

To achieve the stated purpose, the study combined theoretical and empirical research methods. At the theoretical level, methods of analysis, synthesis, systematization, and generalization were applied to the economic-growth, human-capital, and pedagogical literature in order to identify the functional components through which business pedagogy operates as an upbringing-based driver of economic development. The method of structural-functional modeling was used to construct a model linking each function to a corresponding economic development indicator.

At the empirical level, an expert-assessment method was applied. A group of 25 specialists — including researchers in pedagogy and economics, school and college administrators responsible for entrepreneurship-related curricula, and practitioners from regional business incubators — was asked to rate each of the five business-pedagogical functions on a scale from 0 to 10 according to its perceived driving impact on economic development. Ratings were collected individually to avoid group-conformity effects, and the

⁵McClelland, D.C. *The Achieving Society*. Princeton, NJ: Van Nostrand, 1961.

⁶Wennekers, S., Thurik, R. *Linking Entrepreneurship and Economic Growth*. *Small Business Economics*, 1999, Vol. 13, No. 1, pp. 27–56.

⁷Audretsch, D.B., Keilbach, M. *Entrepreneurship Capital and Economic Performance*. *Regional Studies*, 2004, Vol. 38, No. 8, pp. 949–959.

⁸Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union, 2016, EUR 27939 EN.

⁹OECD. *Skills for Social Progress: The Power of Social and Emotional Skills*. *OECD Skills Studies*. Paris: OECD Publishing, 2015.

arithmetic mean score for each function was calculated and ranked. Comparative analysis was then used to interpret the resulting ranking and to relate it to the theoretical model.

ANALYSIS AND RESULTS

4.1. Structural-functional model of business pedagogy as a driver of economic development

The theoretical analysis conducted in the course of the study made it possible to substantiate a structural-functional model describing how upbringing-based business-pedagogical work translates into economic development outcomes through a chain of intermediate stages (Figure 1).



Figure 1. Structural-functional chain linking upbringing to economic development through business pedagogy

Source: compiled by the author.

As shown in Figure 1, upbringing — understood broadly as the coordinated influence of family, school, and community — forms the starting point of the chain. Business pedagogy operationalizes this upbringing potential through five integrated functions, converting it into economic culture and human capital; this, in turn, feeds into entrepreneurial and innovative activity, which ultimately manifests in measurable economic development outcomes such as productivity growth, the expansion of the private sector, and rising employment. The dashed feedback arrow indicates that this is not a one-directional chain: economic development generates fiscal and institutional resources that, when reinvested in upbringing and education systems, strengthen the starting conditions for the next cycle — a dynamic broadly consistent with the self-reinforcing mechanisms described in endogenous growth theory.

The five business-pedagogical functions that constitute the second stage of the chain differ in their content, tools, and the specific economic development indicators they are intended to affect. Their detailed structural-functional characteristics are presented in Table 1.

Table 1. Structural-functional characteristics of business pedagogy as a driver of economic development

Function	Content / Mechanism	Business-Pedagogical Tools	Economic Development Indicator Affected
1.Economic-Cultural Function	Forming economic thinking, values, and norms of economic behavior through upbringing	Values-based upbringing programs, "mahalla – parents – school" partnership, economic-ethics education	Level of economic literacy and culture in society
2.Motivational-Entrepreneurial Function	Cultivating achievement motivation, initiative, and tolerance of risk	Business simulations, mentorship, analysis of success stories	Rate of entrepreneurial activity and new business formation
3. Human-Capital-Forming Function	Building practical economic and business competencies	Project-based learning, vocational-business integration, school "learning firms"	Quality of human capital and labor productivity
4.Institutional-Integrative Function	Linking educational institutions with real economic actors	School–business-incubator partnerships, public–private cooperation in curriculum design	Innovation capacity and the private sector's share in GDP
5.Reflective-Strategic Function	Fostering long-term economic-strategic thinking	Reflective portfolios, scenario-planning exercises, civic-economic projects	Sustainability of regional economic development

Source: compiled by the author.¹⁰

The data presented in Table 1 demonstrate that the five functions of business pedagogy correspond to distinct, identifiable economic development indicators, ranging from general economic literacy (economic-cultural function) to the private sector's share in GDP (institutional-integrative function). This mapping is what allows business pedagogy to be treated not as a diffuse cultural influence but as a structured mechanism whose contribution to economic development can, in principle, be tracked and assessed — a possibility explored empirically in the following section.

¹⁰Compiled by the author based on the research findings.

4.2. Expert assessment of the driving impact of business-pedagogical functions

To assess the relative practical significance of the five functions identified in the theoretical model, an expert survey was conducted among 25 specialists in pedagogy, economics, and entrepreneurship support. Each function was rated on a 0–10 scale according to its perceived impact on economic development, and the resulting average scores are presented in Figure 2.

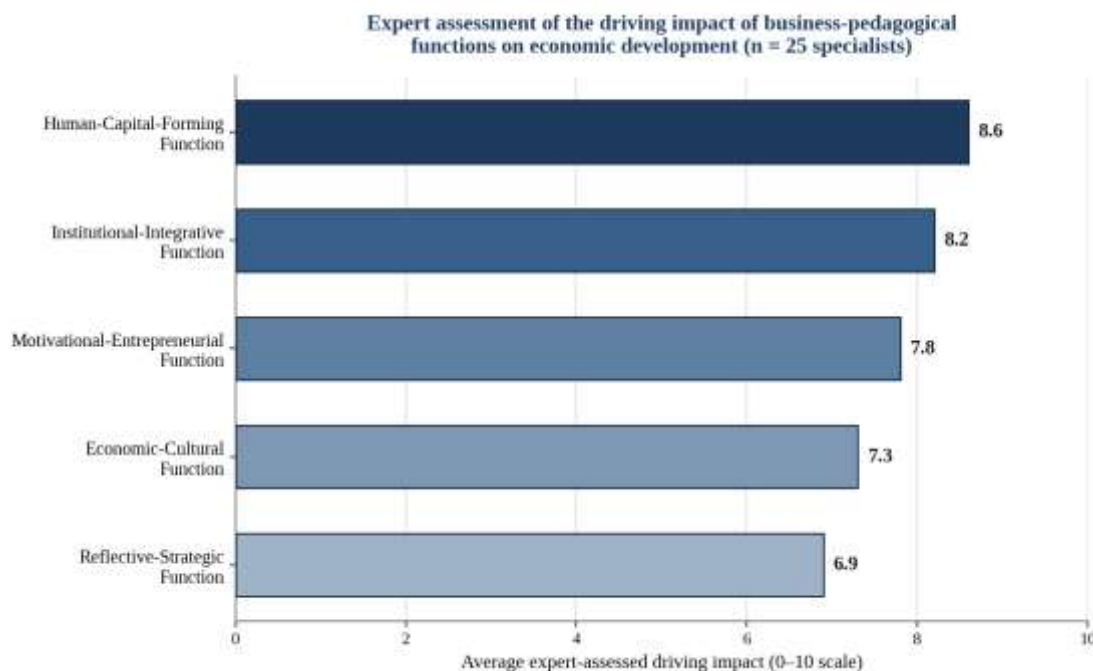


Figure 2. Expert assessment of the driving impact of business-pedagogical functions on economic development

Source: compiled by the author based on the results of the expert survey (n = 25).

As illustrated in Figure 2, the human-capital-forming function received the highest average score (8.6), followed closely by the institutional-integrative function (8.2). The motivational-entrepreneurial function received a moderately high score (7.8), while the economic-cultural (7.3) and reflective-strategic (6.9) functions, although still assessed as substantively important, were ranked lowest among the five. Experts commenting on their ratings noted that practical, competency-forming, and institutionally embedded forms of business-pedagogical work — such as school “learning firms” and school–business-incubator partnerships — were perceived as generating more directly observable economic effects than the broader cultural and reflective functions, whose contribution, while real, is harder to trace to specific economic outcomes over a short time horizon.

This pattern is consistent with the theoretical literature reviewed above: Audretsch and Keilbach’s production-function evidence likewise identified practical, institutionally embedded entrepreneurship capital as a measurable driver of regional output, while the more diffuse cultural dimensions of economic upbringing — though foundational — tend to operate over longer time horizons and through less direct causal pathways. This does not diminish the importance of the economic-cultural and reflective-strategic functions; rather, it suggests that their contribution to economic development is mediated through the other three functions, which they underpin but do not substitute for.

4.3. Mechanisms and conditions for realizing the driver effect

The theoretical and empirical results together indicate that business pedagogy realizes its driver function most effectively when its five components operate as an integrated system rather than as isolated interventions. First, the institutional-integrative function requires genuine, sustained partnerships between educational institutions and real economic actors — regional business incubators, chambers of commerce, and local enterprises — rather than one-off guest lectures or ceremonial cooperation agreements. Second, the human-capital-forming function depends on adequate practical infrastructure, including school “learning firms,” simulation platforms, and project-based curricula, since competencies formed only through theoretical instruction do not translate readily into economic activity. Third, the motivational-entrepreneurial and economic-cultural functions require consistency across the family, school, and community environments identified in Figure 1; upbringing influences that are contradicted across these settings tend to produce weak or unstable effects. Finally, the reflective-strategic function requires institutional patience: its economic returns accrue over a longer horizon than those of the other functions, and policy frameworks that evaluate business-pedagogical work only against short-term indicators risk systematically undervaluing it.

CONCLUSION

The present study has substantiated business pedagogy as an interdisciplinary field that functions as an upbringing-based driver of economic development, connecting the formation of economic culture and entrepreneurial competence in the family, school, and



community to macro-level economic outcomes. The theoretical analysis demonstrated that this proposition is consistent with, and extends, established economic frameworks — human capital theory, endogenous growth theory, and the concept of entrepreneurship capital — while grounding them in the specific pedagogical mechanisms through which they are generated.

The structural-functional model developed in the course of the study identifies five interrelated functions of business pedagogy — economic-cultural, motivational-entrepreneurial, human-capital-forming, institutional-integrative, and reflective-strategic — each linked to a distinct economic development indicator. The expert assessment conducted to evaluate the relative practical significance of these functions showed that the human-capital-forming and institutional-integrative functions are currently perceived as exerting the strongest driving impact, while the economic-cultural and reflective-strategic functions, though foundational, operate through longer and less directly observable causal pathways.

These findings suggest that business pedagogy should not be treated as an auxiliary component of economic education, confined to isolated elective courses, but as a systemic upbringing-based driver of economic development that requires integrated institutional support across the family, school, community, and local business environment. The scientific novelty of the research lies in the structural-functional systematization of business pedagogy as a driver mechanism linking upbringing processes to macroeconomic development indicators, and in the empirical ranking of this mechanism's constituent functions through expert assessment. The practical significance of the study lies in the possibility of using the proposed model and its ranking of functions to prioritize investment and institutional development within national and regional business-pedagogical policy.

RECOMMENDATIONS

Based on the research findings, the following scientific and practical recommendations aimed at strengthening the role of business pedagogy as a driver of economic development have been formulated:

- 1. Prioritizing the human-capital-forming and institutional-integrative functions.** Given their highest assessed driving impact, policy and funding priority should be given to practical, competency-forming formats — school “learning firms,” simulation platforms, and project-based curricula — and to formal, sustained partnerships between educational institutions and regional business incubators.
- 2. Embedding the economic-cultural function across family, school, and community.** Since economic-cultural upbringing operates through multiple, mutually reinforcing environments, coordinated programs involving parents, teachers, and community (mahalla) structures should be developed rather than relying on school-based instruction alone.
- 3. Institutionalizing school–business partnerships.** Formal cooperation agreements with regional business incubators, chambers of commerce, and local enterprises should specify concrete, recurring forms of engagement — mentorship, joint projects, internships — rather than one-off events, in order to realize the institutional-integrative function in practice.
- 4. Allowing longer evaluation horizons for reflective-strategic work.** Monitoring and evaluation frameworks for business-pedagogical programs should include indicators assessed over multi-year horizons, so that the economic-cultural and reflective-strategic functions are not systematically undervalued relative to functions with more immediate, observable effects.
- 5. Developing a national monitoring framework for business pedagogy.** A structured system for tracking the five functions identified in this study — combining expert assessment, curricular audit, and economic indicator tracking — should be developed to allow policymakers to identify which functions require additional institutional investment over time.
- 6. Expanding the research agenda.** Future research should test the proposed structural-functional model using longitudinal economic data, examine its applicability across regions with differing economic structures, and investigate the relative weight of family-based versus school-based upbringing within the economic-cultural function.

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