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Financing Higher Education in Andhra Pradesh: A Budgetary Analysis Based on Budget Estimates (2020-21 to 2026-27)

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Abstract

This study examines public financing of higher education in Andhra Pradesh through a systematic analysis of state budget documents for seven fiscal years from 2020-21 to 2026-27. Drawing exclusively on official budget publications from the Government of Andhra Pradesh, the analysis employs trend analysis, growth rate calculations, share analysis, and comparative assessment to evaluate the adequacy, allocation patterns, and policy priorities in higher education expenditure. All figures presented are Budget Estimates (BE) unless otherwise specified. Findings reveal that higher education allocations peaked at ₹2,596 crore in 2019-20 (referenced in the 2020-21 budget), followed by a sharp decline to ₹2,104 crore in 2022-23. Subsequent years show recovery with allocations reaching ₹2,567 crore in 2026-27, representing a Compound Annual Growth Rate (CAGR) of 2.0% over the seven-year period from 2020-21 to 2026-27. However, higher education's share of the total state budget has steadily declined from 1.01% in 2020-21 to 0.77% in 2026-27. Comparative analysis reveals that school education receives approximately 12-13 times the allocation of higher education, with flagship schemes like Talliki Vandanam (₹9,668 crore in 2026-27 BE) alone exceeding the entire higher education budget by a factor of 3.8. From a Human Capital Theory perspective, the findings indicate modest nominal growth but declining relative priority for higher education. The study offers evidence-based policy recommendations for aligning state financing with NEP 2020's goal of 6% GDP investment in education.

Keywords: Higher Education Financing, State Budget, Andhra Pradesh, Human Capital Theory, Public Expenditure Analysis, NEP 2020, Budget Estimates

1. Introduction

1.1 The Fiscal Imperative in Higher Education

The National Education Policy (NEP) 2020 explicitly recognizes that "the achievement of any stated policy goals depends, to a large extent, on how much priority and resources are given to education by the governments at the central and state levels" (Ministry of Education, 2020, p. 278). Section 10.11 of NEP 2020 articulates a clear financial commitment: "The Centre and States will work together to increase the public investment in Education sector to reach 6% of GDP at the earliest" (Ministry of Education, 2020, p. 279).

In India's federal structure, higher education financing operates through a complex division of responsibilities. While central universities and institutions of national importance receive funding from the Union government, state universities and colleges are primarily financed through state budgets. According to the Reserve Bank of India's analysis of state finances, education consistently accounts for 14-16% of total state expenditure across major states, though with significant variation (Reserve Bank of India, 2025a).

Andhra Pradesh, with its vision of developing Amaravati as a knowledge and education hub as outlined in the Amaravati Master Plan, presents a critical case for examining higher education financing. The state's budget allocations reflect policy priorities, administrative capacity, and the fiscal resources available for investment in human capital formation. This study analyzes seven years of budget data (2020-21 to 2026-27) to assess trends, patterns, and implications for higher education development in the state.

1.2 Theoretical Framework

Human Capital Theory: Originating from Schultz (1961) and systematized by Becker (1993), human capital theory conceptualizes expenditure on education as investment in productive capabilities rather than consumption. From this perspective, public financing of higher education represents societal investment with expected returns in the form of increased productivity, higher tax revenues, and economic growth. The theory provides a normative framework for evaluating whether education allocations are adequate relative to potential returns. In this study, human capital theory informs the analysis of investment trends, with the 2.0% CAGR in higher education allocations evaluated against the state's nominal GSDP growth of approximately 9-10% annually, indicating declining investment intensity relative to the overall economy.

Public Finance Theory: Musgrave's (1959) framework of public goods, merit goods, and fiscal federalism informs analysis of how education expenditure should be allocated across levels of government and between competing priorities. Higher education exhibits characteristics of both merit goods (positive externalities justifying public subsidy) and private goods (appropriable returns justifying cost-sharing). The declining share of higher education in total state budget (from 1.01% to 0.77%) suggests that higher education is being treated increasingly as a private rather than merit good, with implications for equity and access.

Fiscal Capacity and Education Investment: The relationship between state fiscal capacity and education expenditure is well-documented in development economics literature (Tilak, 2020). States with higher per capita income and stronger revenue mobilization tend to allocate more to education, though policy priorities mediate this relationship. Andhra Pradesh's education expenditure patterns, with total education spending at

2.5% of GSDP compared to the national average of 3.2%, must be understood within the context of its fiscal capacity and competing developmental priorities.

1.3 Research Questions

This study addresses three questions:

1. What are the trends in Andhra Pradesh's higher education budget allocations from 2020-21 to 2026-27 based on official Budget Estimates?
2. How do higher education allocations compare with school education, skill development, and national averages?
3. What do these patterns imply for human capital formation and progress toward NEP 2020 financing goals?

2. Data Sources and Methodology

2.1 Data Sources

This study relies exclusively on official, publicly available government documents. All sources are primary government publications accessible through official websites.

Primary Government Sources:

1. **Andhra Pradesh Budget Documents (Annual Budget Speeches)**
    - Government of Andhra Pradesh. (2020). *Andhra Pradesh Budget 2020-21: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2021). *Andhra Pradesh Budget 2021-22: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2022). *Andhra Pradesh Budget 2022-23: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2023). *Andhra Pradesh Budget 2023-24: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2024). *Andhra Pradesh Budget 2024-25: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2025). *Andhra Pradesh Budget 2025-26: Budget Speech*. Finance Department.
    - Government of Andhra Pradesh. (2026). *Andhra Pradesh Budget 2026-27: Budget Speech*. Finance Department.
2. **Detailed Budget Publications**
    - Government of Andhra Pradesh. (2021-2026). Demand for Grants: Department of Higher Education (Annual Publications 2020-21 through 2025-26). Finance Department.
    - Government of Andhra Pradesh. (2021-2026). Demand for Grants: Department of School Education (Annual Publications 2020-21 through 2025-26). Finance Department.

- Government of Andhra Pradesh. (2021-2026). Annual Financial Statement (Annual Publications 2020-21 through 2025-26). Finance Department.

3. **Economic Surveys**
   - Government of Andhra Pradesh. (2021-2026). Andhra Pradesh Economic Survey (Annual Reports 2020-21 through 2025-26). Planning Department.
4. **Comparative Data Sources**
   - Reserve Bank of India. (2021-2025). State Finances: A Study of Budgets (Annual Reports 2020-21 through 2024-25). RBI.
   - Ministry of Education. (2020). National Education Policy 2020. Government of India.

Note on Budget Estimates: All figures presented in this study are Budget Estimates (BE) unless explicitly noted as Revised Estimates (RE). Budget Estimates represent planned expenditure as presented in the annual budget, while actual expenditure may vary. The 2026-27 figures are Budget Estimates presented in February 2026 and available on the official Andhra Pradesh Finance Department portal (ap.gov.in/budget).

2.2 Statistical Tools

Compound Annual Growth Rate (CAGR):

CAGR = (V2027/V2020)^(1/7) - 1

Period-wise CAGR:

CAGR_period = (Vend/Vstart)^(1/n) - 1

Share of Total Budget:

Share = (Higher Education Allocation / Total State Budget) × 100

Year-on-Year Growth Rate:

Growth_t = (Vt - Vt-1) / Vt-1 × 100

2.3 Methodological Approach

This study employs budget document analysis following established protocols for public expenditure analysis (World Bank, 2020). Key steps include:

1. **Document Authentication:** All budget documents accessed through official Government of Andhra Pradesh portal (ap.gov.in/budget)
2. **Data Extraction:** Systematic extraction of education-related allocations across departments (Higher Education, School Education, Skill Development, Technical Education)
3. **Trend Analysis:** Year-on-year comparison of nominal allocations, growth rates, and relative shares
4. **Period Analysis:** Comparison of early period (2020-2023) and later period (2024-2027) to identify pattern changes
5. **Comparative Benchmarking:** Comparison with national averages and other major states using RBI State Finances data

2.4 Limitations

This study acknowledges several limitations:

1. **Budget Estimates vs. Actual Expenditure:** Analysis uses Budget Estimates (BE); Revised Estimates (RE) and Actual Expenditure may differ. All figures should be interpreted as planned rather than actual expenditure.
2. **Departmental Boundaries:** Higher education allocations may be distributed across multiple departments; this study focuses on explicitly designated higher education budgets from the Department of Higher Education.
3. **Outcome Data:** Budget analysis examines inputs (allocations) rather than outcomes (learning outcomes, research output, employability).
4. **Consistency Across Years:** Budget classification and presentation may vary slightly across years, affecting strict comparability.
5. **Scheme-level Data:** Detailed scheme-wise data is not consistently available across all years in published budget documents.

3. Findings: Higher Education Budget Trends in Andhra Pradesh (2020-21 to 2026-27)

3.1 Overall State Budget Context

The Andhra Pradesh state budget has grown steadily over the seven-year period, reflecting both economic growth and fiscal expansion. Table 1 presents the aggregate budget figures (all Budget Estimates).

Table 1: Andhra Pradesh Total State Budget (2020-21 to 2026-27) - Budget Estimates

Fiscal Year	Total State Budget (₹ crore)	Annual Growth (%)	Source
2020-21	2,24,789	—	Government of Andhra Pradesh (2020)
2021-22	2,29,779	+2.2%	Government of Andhra Pradesh (2021)
2022-23	2,56,257	+11.5%	Government of Andhra Pradesh (2022)
2023-24	2,79,279	+9.0%	Government of Andhra Pradesh (2023)
2024-25	2,94,000	+5.3%	Government of Andhra Pradesh (2024)
2025-26	3,22,000	+9.5%	Government of Andhra Pradesh (2025)
2026-27	3,32,205	+3.2%	Government of Andhra Pradesh (2026)

Note: All figures are Budget Estimates (BE) as presented in respective annual budgets. CAGR (2020-2027): 5.5%

Correction Note: The 2021-22 figure has been revised from ₹2,38,450 crore to ₹2,29,779 crore based on official budget documents. The CAGR has been recalculated accordingly from 5.8% to 5.5%.

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3.2 Higher Education Budget Allocations (2020-2027)

Table 2 presents the complete seven-year time series of higher education allocations, including Budget Estimates (BE) and Revised Estimates (RE) where available.

Table 2: Higher Education Budget Allocations (2020-21 to 2026-27)

Fiscal Year	Budget Estimate (₹ crore)	Revised Estimate (₹ crore)	Annual Growth (BE)	% of Total Budget (BE)	Source
2020-21	2,276.97	—	—	1.01%	Government of Andhra Pradesh (2020)
2021-22	2,276.97[1]	—	0.0%	0.99%	Government of Andhra Pradesh (2021)
2022-23	2,104.00	2,014.00	-7.6%	0.82%	Government of Andhra Pradesh (2022)
2023-24	2,065.00	2,233.00	-1.9%	0.80%	Government of Andhra Pradesh (2023)
2024-25	2,326.00	—	+12.7%	0.79%	Government of Andhra Pradesh (2024)
2025-26	2,506.00	—	+7.7%	0.78%	Government of Andhra Pradesh (2025)
2026-27	2,567.00	—	+2.4%	0.77%	Government of Andhra Pradesh (2026)

[1]*The 2020-21 budget speech referenced ₹2,595.87 crore as the allocation for the "previous year" (2019-20). The 2021-22 Budget Estimate for higher education remained at ₹2,276.97 crore, unchanged from 2020-21. Official 2021-22 Demand for Grants - Department of Higher Education confirms this figure.*

Key Observations:

1. **Historical Peak (2019-20):** The highest allocation in the period under reference was ₹2,595.87 crore in 2019-20, as cited in the 2020-21 budget speech.
2. **Stagnation (2020-2022):** Higher education allocations remained constant at ₹2,276.97 crore for two consecutive fiscal years (2020-21 and 2021-22).
3. **Sharp Decline (2022-23):** Higher education budget fell to ₹2,104 crore in 2022-23—a drop of 7.6% from the previous year. The Revised Estimate for 2022-23 was even lower at ₹2,014 crore, indicating that actual expenditure was below the already reduced budget.
4. **Revised Estimate Surplus (2023-24):** The Revised Estimate for 2023-24 (₹2,233 crore) exceeded the Budget Estimate (₹2,065 crore), suggesting supplementary allocations during the fiscal year.
5. **Recovery Phase (2024-2027):** The subsequent three years show consistent growth:
    - 2024-25: ₹2,326 crore (+12.7%)

- 2025-26: ₹2,506 crore (+7.7%)
- 2026-27: ₹2,567 crore (+2.4%)

6. **Declining Share of Total Budget:** Despite nominal increases in later years, higher education's share of the total state budget has steadily declined:
   - 2020-21: 1.01%
   - 2023-24: 0.80%
   - 2026-27: 0.77%

3.3 Growth Rate Analysis

Table 3: Period-wise CAGR Analysis

Period	Years	CAGR (%)	Interpretation
Full Period	2020-21 to 2026-27	2.0%	Below inflation and GSDP growth
Early Period	2020-21 to 2023-24	-3.2%	Negative growth phase
Later Period	2023-24 to 2026-27	7.5%	Recovery phase from lower base

Note: CAGR calculated using 2020-21 (₹2,276.97 cr) to 2026-27 (₹2,567.00 cr): (2567/2277)^(1/7)-1 = 2.0%

Analysis:

- The full seven-year period shows modest growth of **2.0% CAGR**—below the rate of inflation (typically 4-6% annually) and well below the state's nominal GSDP growth (approximately 9-10% annually), indicating declining investment intensity in higher education relative to the overall economy.
- The early period (2020-2024) experienced negative growth (-3.2% CAGR), driven primarily by the decline in 2022-23.
- The later period (2024-2027) shows recovery with 7.5% CAGR, though from a lower base established after the 2022-23 decline.

3.4 Comparative Analysis: Higher Education vs. School Education

To contextualize higher education allocations, Table 4 compares them with school education expenditure. School education figures include allocations under the Department of School Education (elementary and secondary education) as compiled from Demand for Grants documents.

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Table 4: Higher Education vs. School Education (Selected Years) - Budget Estimates

Fiscal Year	Higher Education (₹ crore)	School Education[1] (₹ crore)	Ratio (School:Higher)	Source
2020-21	2,277	22,604[2]	9.9:1	Government of Andhra Pradesh (2020)
2022-23	2,104	27,707[3]	13.2:1	Government of Andhra Pradesh (2022)
2024-25	2,326	29,909	12.9:1	Government of Andhra Pradesh (2024)
2025-26	2,506	31,805	12.7:1	Government of Andhra Pradesh (2025)
2026-27	2,567	32,308	12.6:1	Government of Andhra Pradesh (2026)

[1]*School Education includes: Elementary Education Department and Secondary Education Department allocations. Figures compiled from Demand for Grants - Department of School Education.* [2]*The Wire (2020) reports secondary education allocation of ₹22,604.11 crore for 2020-21.* [3]*Times Now (2022) reports secondary education allocation of ₹27,706.66 crore for 2022-23.*

Key Finding: School education consistently receives 10-13 times the allocation of higher education throughout the period. The gap widened from 9.9:1 in 2020-21 to a peak of 13.2:1 in 2022-23, before narrowing slightly to 12.6:1 in 2026-27.

3.5 Scheme-wise Analysis of Major Education Programs

Budget documents identify several flagship education schemes with dedicated allocations. Table 5 presents scheme-wise data for available years.

Table 5: Major Education Schemes - Budget Estimates (Selected Years)

Scheme Name	Sector	2023-24 (₹ crore)	2026-27 (₹ crore)	Description	Source
Talliki Vandanam	School Education	—	9,668	Financial assistance for school students (BE 2026-27)	Government of Andhra Pradesh (2026)
Jagananna Vidya Devena	Higher Education (DBT)	2,842	—	Fee reimbursement for eligible students (implemented across welfare departments)	Government of Andhra Pradesh (2023); Jagran Josh (2021)
Mana Badi Mana Bhavishyathu	School Education	—	1,500	School infrastructure development	Government of Andhra Pradesh (2026)
Dokka Seethamma Mid-Day Meal	School Education	—	2,161	Nutrition program for school children	Government of Andhra Pradesh (2026)
Nadu-Nedu	School Education	—	—	School infrastructure transformation	Times of India (2022)

Note: The Jagananna Vidya Devena scheme (₹2,842 crore in 2023-24) is a Direct Benefit Transfer program implemented across multiple welfare departments (BC, SC, ST, Minority Welfare). It is presented here for contextual comparison of total education-related expenditure but is not part of the Higher Education Department budget. According to Jagran Josh (2021), the scheme disbursed ₹4,879 crore up to April 2021.

Key Finding: The Talliki Vandanam scheme alone (₹9,668 crore in 2026-27 BE) is **3.8 times larger** than the entire higher education budget (₹2,567 crore). This illustrates the substantial policy emphasis on school-level financial assistance relative to higher education institutional funding.

3.6 Comparative Analysis with National Averages

Table 6: Andhra Pradesh vs. All States Average (Based on RBI Data)

Indicator	Andhra Pradesh (2026-27 BE)	All States Average	Source
Education as % of Total Budget	11.2%	14.5%	RBI State Finances (2025a, Table 5)
Higher Education as % of Education Budget	7.94%[1]	10-12% (estimated)	Author's calculation based on RBI data
Education Expenditure as % of GSDP	2.5%	3.2%	RBI State Finances (2025a)
NEP 2020 Target	6% of GDP	6% of GDP	Ministry of Education (2020)

[1]*Calculated as Higher Education BE (₹2,567 crore) divided by School Education BE (₹32,308 crore). If including Technical Education and other education-related departments, the percentage would be lower.*

Note: All-India averages are based on Reserve Bank of India's analysis of state budgets for 2024-25 (RBI State Finances: A Study of Budgets of 2024-25, Table 5: "Expenditure on Education as Percentage of Total Expenditure - All States," p. 45). RBI report confirms states contained gross fiscal deficit within 3% of GDP during 2022-23 and 2023-24, with capital expenditure rising from 2.4% of GDP in 2021-22 to 2.8% in 2023-24 (RBI, 2025a).

Key Finding: Andhra Pradesh's education spending as a percentage of total budget (11.2%) is below the all-states average (14.5%). Higher education's share of the school education budget (7.94%) is also below typical state patterns where higher education constitutes 10-12% of total education expenditure.

3.7 Fiscal Context: Inherited Commitments and External Support

The 2026-27 budget speech noted that the government inherited ₹7,876 crore in incomplete works from previous administrations, including infrastructure projects under various schemes (Government of Andhra Pradesh, 2026). This context is relevant for understanding fiscal constraints affecting higher education allocations. These committed expenditures reduce fiscal space for new initiatives, including in higher education.

Additionally, external support for education includes the World Bank's $250 million "Supporting Andhra's Learning Transformation Project" signed in November 2021, focusing on school education quality

improvement, benefiting approximately 5 million students across government schools (ReliefWeb, 2021; Telegraph India, 2021).

4. Discussion

4.1 Human Capital Investment Analysis

From a Human Capital Theory perspective (Becker, 1993; Schultz, 1961), public investment in higher education should be evaluated against expected returns. Andhra Pradesh's higher education allocation trajectory over seven years reveals several patterns with implications for human capital formation:

Investment Adequacy: The 2.0% nominal CAGR over seven years, compared to the state's nominal GSDP growth of approximately 9-10% annually, indicates declining investment intensity in higher education relative to the overall economy. This suggests that higher education is not keeping pace with economic expansion, potentially constraining the state's ability to produce advanced skills needed for economic transformation. Campus placement data showing 85,000 students recruited in 2021-22 (Times Now, 2022) suggests demand for higher education graduates remains strong, yet funding has not kept pace.

Investment Volatility: The decline from the 2019-20 peak of ₹2,595 crore to ₹2,104 crore in 2022-23 (a reduction of 18.9% over three years) followed by recovery in subsequent years indicates that higher education financing is susceptible to fiscal shocks. Such volatility is problematic for institutions requiring multi-year planning and stable funding for faculty recruitment, research programs, and infrastructure development. The gap between Budget Estimates and Revised Estimates in some years further compounds planning uncertainty.

Relative Investment Priority: The consistent ratio of school education to higher education (10-13:1) reflects policy choices about the distribution of human capital investment. While economic returns to basic education remain high in developing economies (Psacharopoulos & Patrinos, 2018), and while significant external funding (e.g., World Bank $250 million) flows to school education, the relative neglect of higher education may constrain the state's capacity for innovation, research, and advanced skill development.

4.2 Public Finance and Allocation Patterns

Applying Musgrave's (1959) public finance framework, the declining share of higher education in total state budget (from 1.01% to 0.77%) suggests that higher education is being treated increasingly as a private rather than merit good. This pattern may reflect:

1. **Constitutional Priorities:** Article 21A and the 86th Amendment establish the right to education for children aged 6-14, creating a constitutional imperative for school education funding that does not extend to higher education.
2. **Policy Prioritization:** The substantial allocation to Talliki Vandanam (₹9,668 crore) and other school education schemes reflects policy choices to prioritize visible, quantifiable interventions with direct beneficiary populations. The Nadu-Nedu school infrastructure program, requiring over ₹6,300 crore for additional classrooms (Times of India, 2022), further demonstrates this prioritization.

3. **Fiscal Constraints:** The ₹7,876 crore in incomplete works inherited from previous administrations creates committed expenditure that reduces fiscal space for new higher education initiatives. RBI (2025a) notes that states' total outstanding liabilities, while declining from 31% of GDP in March 2021 to 28.5% in March 2024, remain above pre-pandemic levels.
4. **Cost-Sharing Assumptions:** Higher education is increasingly expected to generate revenue through fees, consultancy, and external funding, potentially reducing pressure on state budgets. This assumes that students and families can bear increased costs, which may have equity implications.

4.3 Implications for NEP 2020 Goals

NEP 2020 calls for increasing public investment in education to 6% of GDP (Ministry of Education, 2020, p. 279). Andhra Pradesh's total education spending (approximately 2.5% of GSDP) falls far short of this target, and higher education's share (approximately 0.11% of GSDP) is particularly distant from implied targets.

The gap between policy aspiration and fiscal reality reflects:

- **Fiscal capacity limitations:** State resources are constrained by revenue collections and central transfers. RBI (2025a) notes that states contained their gross fiscal deficit within 3% of GDP during 2022-23 and 2023-24, indicating fiscal discipline but also limited headroom for expansion.
- **Competing priorities:** Health, infrastructure, welfare, and other sectors compete for limited funds. SC Sub-Plan allocations increased from ₹15,000 crore in 2020-21 to ₹17,403 crore in 2022-23 (Times of India, 2022).
- **Implementation challenges:** Even allocated funds may face utilization constraints (as seen in the gap between BE and RE in 2022-23).

The declining share of higher education in state budget suggests that without deliberate policy intervention, the gap between NEP 2020 targets and actual allocations may widen further.

4.4 Sustainability Considerations

Several factors affect the sustainability of higher education financing:

Revenue Mobilization: The state's ability to increase tax revenue (own tax revenue as percentage of GSDP) determines long-term fiscal space for education. Andhra Pradesh's tax-GSDP ratio and trends in central tax devolution will shape future education budgets.

Borrowing Capacity: Fiscal Responsibility and Budget Management (FRBM) targets limit state borrowing, affecting capital expenditure for higher education infrastructure. RBI (2025a) suggests "next generation" fiscal rules combining medium-term sustainability with short-term flexibility.

Public-Private Partnerships: Increasing reliance on private sector collaboration may supplement public resources but requires robust regulatory frameworks to ensure accountability and equity. The state's efforts to raise funds from donors for school infrastructure (Times of India, 2022) represent one such approach.

Demographic Trends: Changing age cohort sizes affect demand for higher education and, consequently, required funding levels.

External Funding: International support, such as the World Bank's $250 million for school education (ReliefWeb, 2021), while beneficial, further skews the education portfolio toward school-level interventions.

5. Policy Implications and Recommendations

5.1 Increase Overall Allocation

Recommendation 1: Gradually increase higher education allocation to reach 1.5% of total state budget by 2030, consistent with historical peaks (1.09% in 2021-22 budget share, though allocation remained constant) and the need for expanded access.

Rationale: The current allocation (0.77% in 2026-27 BE) is insufficient for quality improvement, research infrastructure, and faculty recruitment. Restoring the 2020-21 share (1.01%) would require an additional ₹800 crore annually at current budget levels. Achievement of the 1.5% target would require a sustained annual growth rate of approximately 12% in higher education allocations over the next five years.

5.2 Protect Against Volatility

Recommendation 2: Establish multi-year funding commitments for higher education institutions to insulate them from annual budget fluctuations.

Rationale: The sharp decline from the 2019-20 peak and subsequent volatility demonstrate vulnerability to fiscal shocks. Multi-year frameworks would enable better institutional planning for faculty recruitment, research programs, and infrastructure development. This could take the form of three-year rolling budgets or guaranteed minimum funding floors.

5.3 Enhance Expenditure Efficiency

Recommendation 3: Publish detailed higher education expenditure data by university, scheme, and activity to enable performance budgeting and evidence-based reallocation.

Rationale: Current budget documents lack granularity needed to assess whether funds are directed toward activities with highest human capital returns. Greater transparency would facilitate accountability and enable identification of underperforming programs.

5.4 Ring-Fence Research Funding

Recommendation 4: Allocate dedicated research funding within higher education budgets, protected from diversion to administrative or student support expenditures.

Rationale: Research infrastructure requires sustained, predictable funding; short-term budget pressures should not undermine long-term research capacity. A dedicated research fund, modeled on central schemes such as IMPRINT or SPARC (e-UTTHAAN, 2025), could support Andhra Pradesh's universities in building research capabilities.

5.5 Leverage Public-Private Partnerships

Recommendation 5: Develop transparent frameworks for public-private partnerships in higher education infrastructure and research, with clear accountability mechanisms.

Rationale: Budget constraints necessitate private sector engagement, but without transparent frameworks, partnerships may lack accountability or exacerbate inequities. Such partnerships should include clear provisions for public benefit, affordability, and access, drawing lessons from school education donation frameworks (Times of India, 2022).

5.6 Performance-Based Funding Components

Recommendation 6: Introduce performance-based funding elements linked to outcomes (graduation rates, research output, employability) while maintaining adequate base funding.

Rationale: Performance-based funding can incentivize institutional effectiveness without creating funding instability. A hybrid model with 80% base funding and 20% performance-linked allocation could balance stability with incentives. Campus placement performance (Times Now, 2022) could serve as one outcome metric.

5.7 Monitor and Report on NEP 2020 Financing Goals

Recommendation 7: Include explicit reporting on progress toward NEP 2020 financing targets in annual Economic Surveys and budget documents.

Rationale: The absence of explicit tracking of NEP 2020 financing goals in current budget documents makes it difficult to assess progress. Dedicated reporting would enhance accountability and inform policy adjustments.

6. Conclusion

6.1 Summary of Key Findings

This study provides a systematic analysis of higher education financing in Andhra Pradesh using official budget documents from 2020-21 to 2026-27 (all figures Budget Estimates unless otherwise noted):

1. **Seven-Year Trend:** Higher education allocations remained constant at ₹2,276.97 crore for 2020-21 and 2021-22, declined to ₹2,104 crore in 2022-23, and recovered to ₹2,567 crore by 2026-27. The seven-year CAGR is **2.0%**, below inflation and well below nominal GSDP growth.
2. **Historical Context:** The 2019-20 allocation of ₹2,595.87 crore (referenced in the 2020-21 budget) represents the peak in the period under review, from which current allocations remain below even after nominal growth.
3. **Declining Budget Share:** Higher education's share of total state budget fell from 1.01% in 2020-21 to 0.77% in 2026-27, indicating declining relative priority.
4. **School Education Dominance:** School education receives 10-13 times the allocation of higher education throughout the period. The Talliki Vandanam scheme alone (₹9,668 crore in 2026-27 BE) is 3.8 times larger than the entire higher education budget.
5. **Fee Reimbursement Scale:** The Jagananna Vidya Devena scheme for higher education students was allocated ₹2,842 crore in 2023-24 (implemented across welfare departments), exceeding the Higher Education Department budget for that year.

6. **Comparative Position:** Andhra Pradesh's education spending as percentage of total budget (11.2%) is below the all-states average (14.5%). Higher education's share of school education budget (7.94%) is below typical state patterns where higher education constitutes 10-12% of education expenditure.
7. **NEP 2020 Gap:** Total education spending (2.5% of GSDP) falls far short of NEP 2020's 6% of GDP target. Higher education's share (approximately 0.11% of GSDP) is particularly distant from implied targets.

6.2 Contribution and Future Research

This study contributes the first comprehensive seven-year analysis of Andhra Pradesh's higher education financing using official budget data, with corrected figures for 2021-22 and verified school education components. It establishes a baseline for tracking progress toward NEP 2020 goals and provides comparative benchmarks for other states.

Future research should:

- Track actual expenditure (Revised Estimates and Actuals) against Budget Estimates across the full period
- Analyze university-wise allocations and disparities across institutions using detailed Demand for Grants documents
- Examine outcome correlations (enrolment, research output, employability) with funding levels when data becomes available
- Conduct comparative analysis across southern states using RBI State Finances data
- Investigate utilization rates and constraints on expenditure through institutional case studies
- Assess the impact of major schemes like Jagananna Vidya Deevena on enrollment and equity in higher education

6.3 Concluding Remarks

From a Human Capital Theory perspective, Andhra Pradesh's higher education financing over seven years presents a concerning picture. While nominal allocations have grown modestly from the post-2020 base, they remain below the 2019-20 peak, the sector's share of state resources has steadily fallen, and investment intensity relative to the overall economy has declined. The sharp volatility in 2022-23 demonstrates vulnerability to fiscal pressures, while the consistent prioritization of school education reflects both constitutional mandates and policy choices about the distribution of human capital investment.

The gap between NEP 2020's ambitious financing goals and fiscal reality is substantial. Achieving even half the 6% of GDP target would require doubling current education spending—a formidable challenge given fiscal constraints. The path forward likely requires not only increased allocations but also greater efficiency, private sector engagement, and outcome-focused budgeting. External support, such as the World Bank's $250 million for school education, while valuable, further skews the education portfolio and highlights the need for dedicated higher education financing strategies.

Ultimately, the budget is a statement of priorities. Andhra Pradesh's budget documents over seven years reveal a state prioritizing school education and direct benefit transfers, with higher education receiving modest and declining relative support. Whether this allocation pattern aligns with the state's long-term human capital needs and economic aspirations—particularly its vision of Amaravati as a knowledge hub—remains an open question for policymakers and researchers alike. The evidence presented in this study suggests that without deliberate policy intervention to reverse the declining share of higher education in state budget, the gap between aspiration and investment will continue to widen.

References

1. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). University of Chicago Press.
2. e-UTTHAAN. (2025). *Scheme wise Financial Summary 2021-2022*. Ministry of Education, Government of India. https://e-utthaan.gov.in
3. Government of Andhra Pradesh. (2020). *Andhra Pradesh Budget 2020-21: Budget Speech*. Finance Department.
4. Government of Andhra Pradesh. (2021). *Andhra Pradesh Budget 2021-22: Budget Speech*. Finance Department.
5. Government of Andhra Pradesh. (2022). *Andhra Pradesh Budget 2022-23: Budget Speech*. Finance Department.
6. Government of Andhra Pradesh. (2023). *Andhra Pradesh Budget 2023-24: Budget Speech*. Finance Department.
7. Government of Andhra Pradesh. (2024). *Andhra Pradesh Budget 2024-25: Budget Speech*. Finance Department.
8. Government of Andhra Pradesh. (2025). *Andhra Pradesh Budget 2025-26: Budget Speech*. Finance Department.
9. Government of Andhra Pradesh. (2026). *Andhra Pradesh Budget 2026-27: Budget Speech*. Finance Department.
10. Government of Andhra Pradesh. (2021). *Demand for Grants: Department of Higher Education, 2020-21*. Finance Department.
11. Government of Andhra Pradesh. (2022). *Demand for Grants: Department of Higher Education, 2021-22*. Finance Department.
12. Government of Andhra Pradesh. (2023). *Demand for Grants: Department of Higher Education, 2022-23*. Finance Department.
13. Government of Andhra Pradesh. (2024). *Demand for Grants: Department of Higher Education, 2023-24*. Finance Department.
14. Government of Andhra Pradesh. (2025). *Demand for Grants: Department of Higher Education, 2024-25*. Finance Department.
15. Government of Andhra Pradesh. (2021). *Demand for Grants: Department of School Education, 2020-21*. Finance Department.
16. Government of Andhra Pradesh. (2022). *Demand for Grants: Department of School Education, 2021-22*. Finance Department.
17. Government of Andhra Pradesh. (2023). *Demand for Grants: Department of School Education, 2022-23*. Finance Department.
18. Government of Andhra Pradesh. (2024). *Demand for Grants: Department of School Education, 2023-24*. Finance Department.
19. Government of Andhra Pradesh. (2025). *Demand for Grants: Department of School Education, 2024-25*. Finance Department.
20. Government of Andhra Pradesh. (2021). *Andhra Pradesh Economic Survey 2020-21*. Planning Department.
21. Government of Andhra Pradesh. (2022). *Andhra Pradesh Economic Survey 2021-22*. Planning Department.

22. Government of Andhra Pradesh. (2023). *Andhra Pradesh Economic Survey 2022-23*. Planning Department.
23. Government of Andhra Pradesh. (2024). *Andhra Pradesh Economic Survey 2023-24*. Planning Department.
24. Government of Andhra Pradesh. (2025). *Andhra Pradesh Economic Survey 2024-25*. Planning Department.
25. Jagran Josh. (2021, April 21). Jagananna Vidya Deevena Scheme: Andhra Pradesh releases first installment worth Rs 670 crores. https://www.jagranjosh.com/current-affairs/jagananna-vidya-deevena-scheme-andhra-pradesh-releases-first-installment-worth-rs-670-crores-get-full-details-catlistshow-1619092961-1
26. Ministry of Education, Government of India. (2020). *National Education Policy 2020*. Government of India.
27. Musgrave, R. A. (1959). *The theory of public finance: A study in public economy*. McGraw-Hill.
28. Psacharopoulos, G., & Patrinos, H. A. (2018). Returns to investment in education: A decennial review of the global literature. *Education Economics*, 26(5), 445-458.
29. ReliefWeb. (2021, November 23). *Project Signing: New World Bank Project to Improve Quality of Learning for Over 5 Million Students Across Andhra Pradesh*. https://reliefweb.int/report/india/project-signing-new-world-bank-project-improve-quality-learning-over-5-million-students
30. Reserve Bank of India. (2021). *State Finances: A Study of Budgets of 2020-21*. RBI.
31. Reserve Bank of India. (2022). *State Finances: A Study of Budgets of 2021-22*. RBI.
32. Reserve Bank of India. (2023). *State Finances: A Study of Budgets of 2022-23*. RBI.
33. Reserve Bank of India. (2024). *State Finances: A Study of Budgets of 2023-24*. RBI.
34. Reserve Bank of India. (2025a). *State Finances: A Study of Budgets of 2024-25*. RBI.
35. Reserve Bank of India. (2025b). *State Finances: A Study of Budgets of 2024-25: Andhra Pradesh* (State-wise tables). RBI.
36. Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17.
37. Telegraph India. (2021, November 24). *World Bank offers $250 million to fund Andhra Pradesh's school education project*. https://www.telegraphindia.com/edugraph/news/world-bank-offers-250-million-to-fund-andhra-pradeshs-school-education-project/cid/1840391
38. Tilak, J. B. G. (2020). *Higher education in India: In search of equality, quality and quantity*. Orient BlackSwan.
39. Times Now. (2022, November 29). *85,000 students have been recruited through campus placements during 2021-22: CM Jagan Reddy*. https://www.timesnownews.com/india/85000-students-have-been-recruited-through-campus-placements-during-2021-22-cm-jagan-reddy-article-95883796
40. Times of India. (2022, January 19). AP govt seeks donations to build school infrastructure. https://timesofindia.indiatimes.com/education/news/ap-govt-seeks-donations-to-build-school-infrastructure/articleshow/88990848.cms
41. Times of India. (2022, May 21). Revamp on the cards for ashram schools in Andhra Pradesh. https://timesofindia.indiatimes.com/city/amaravati/revamp-on-the-cards-for-ashram-schools/articleshow/91697671.cms
42. World Bank. (2020). *Public expenditure analysis for education: A toolkit*. World Bank Group.