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Original Article

From Single Campus to Institutional Networks Capital Structure, Capital Allocation, and Growth Strategy in Educational Enterprises

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ABSTRACT: *The education sector is going through rapid change as academic institutions are constantly pressured to adopt digital advancements, improve quality, achieve sustainable growth, and manage increasing operational costs while lacking resources. Effective capital allocation and structure are paramount for higher education institutions to expand into interlinked networks of campuses. This study investigates the relationship between capital allocation, structure, and growth strategy in academic institutions, while focusing broadly on larger networks rather than single-campus units. This study is based on a descriptive, conceptual, and exploratory research design using secondary data collected from institutional reports, peer-reviewed studies, and government reports and publications like UNESCO and OECD. This study investigates various sources of capital allocation, such as donations, retained earnings, partnerships, etc. and their role in promoting the expansion of institutions. Capital allocation is further explored around institutional programs, physical infrastructure, technology, student services, faculty, etc. It is identified in the study that expansion, mergers, university networks, technological adoption and internationalization are some of the key growth strategies for academic institutions. It is observed that sustainable growth needs alignment between long-term goals, resource allocation, and financial potential. Instead of considering growth as expansion of institutions, academic institutions should build scalable solutions to share resources, academic collaboration, adoption of technology, and efficient operations. This study adds conceptual knowledge on how sustainable growth can be achieved with capital allocation to develop networks in the changing environment.*

KEYWORDS: *Academic Institutions, Institutional Networks, Growth Strategy, Capital Allocation, Educational Enterprises.*

1. INTRODUCTION

The education sector is transforming rapidly in today's digital world, where universities and colleges have to do more with limited resources. They are mainly aimed at providing quality education, but their burden is rising when it comes to technology adoption, financial management, and operations. Administrators find it challenging to focus on the core mission the success of students. Efficient capital allocation is one of the core issues for academic institutions to deploy financial resources for both growth and sustainability. Only with capital allocation can academic institutions make the most of their investments and financial resources (OECD, 2020). They need to balance investments in facilities, academic programs, faculty, technology and student services to handle operating costs and long-term growth (OECD, 2020).

Along with running a business, schools are also the foundation for success for future citizens. Schools are more than academic institutions when it comes to capital allocation. They need to align their operational benefits and academic goals with financial decisions. Students are at the core of any academic institution. It is important to prioritize expenses that have a direct role in the success of students when it comes to capital allocation, such as enhancing learning experiences, study programs, or adding faculty. Academic institutions should focus on improving students' learning experience with their investments (OECD, 2020). They should ask – will it improve student retention, appeal to more students, or improve learning outcomes? Along with study-oriented areas, institutions should ensure ample availability of resources for long-term needs, including curriculum innovation, program development, and upgrading facilities. With the growth of schools, it is important to focus on these areas to be futuristic and competitive (OECD, 2020).

In capital allocation, aligning priorities with long-term financial health is one of the core challenges of academic institutions. Educational enterprises need to meet modern demands like enhancing amenities and technological updates, while also meeting strategic needs and keeping reserves for future developments, such as research programs, expanding campus, and community programs. Educational enterprises need to make financial plans for several years to achieve this balance (OECD, 2025). Prior planning gives them the power to predict future risks, revenue opportunities and expenses to make informed decisions on capital allocation. They can avoid potential pitfalls by focusing too much on short-term fixes at the cost of long-term stability with this long-term view (OECD, 2025).

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Technology is very important for both operational and academic growth in this day and age. Choosing the right technology can improve the overall functioning of academic institutions, i.e., from virtual classrooms to data analytics apps. However, technology also comes with initial costs and investment to stay updated. Academic institutions must choose the right technology for higher ROI when it comes to capital allocation. Along with the latest tools, they also have to choose solutions that improve overall learning experience, efficiency, and minimize operational costs (OECD, 2023).

Academic institutions can also outsource non-important functions to improve allocation of capital, for example, human resources, payroll, IT support, and facility management. These are important tasks, but they don't play a direct role in the core mission of student success. These functions can be outsourced by schools to free up both their HR and financial resources and redirect them to students' growth and their academic activities (Johnson and Turner, 2009). With the help of outsourcing, schools can use professionals' expertise while reducing overhead. Along with improving efficiency, they can also add flexibility in capital allocation. For instance, an educational institution can outsource IT jobs to allocate its resources to upgrade classrooms or curriculum to match industry standards (Rosen and Sappington, 2016).

For efficient capital allocation, academic institutions can also collaborate. They can partner with non-profits, businesses, and other institutions to unlock new funding opportunities. Whether working with tech companies for software support or local businesses for internship programs, collaborations can help with capital allocation very well (Dundar and Lewis, 1995). Capital allocation is one of the important aspects for educational enterprises. They can prioritize investments for students' growth, leverage technology, outsource non-essential operations, collsaborate, and manage their long-term and short-term needs to optimize their capital for long-term growth (Selwyn, 2016).

2. LITERATURE REVIEW

Pittaway and Hannon (2008) identified criteria to determine the viability of strategies made for education and introduced models to organize education. They explained several essential criteria like financial sustainability, academic impact, human capital, credibility, infrastructure, embeddedness, community engagement, institutional policy, and policy funding and context. They explained each criterion and its viability to explore the sustainability of education in the long term. It is observed that various models may help in various contexts of higher education, and the temporal nature of relations.

In the 1980s and 1990s, transformation in national funding and financial pressures on academic institutions brought a shift to more market-based management styles, which came with a rise in formulated-devolved approaches of allocating resources at the institutional level. Thomas (1996) used studies at two universities in the UK to explore how to influence the system with a shift to entrepreneurship and the relative strength of traditional models of collegiality, bureaucracy, and politics. They also explored how this approach can influence harmony between cultural norms. Management should understand the relationship between resource allocation and institutional culture.

Resource allocation and strategic planning are needed to reinforce the success and sustainability of colleges and universities in the long term. Higher educational institutions face several challenges in this day and age of the digital world, such as diversity of student backgrounds, reduced public funding, and increasing operational costs. Strategic planning acts as an important tool to define their goals, set priorities among several programs, and ensure allocation of resources to improve effectiveness and efficiency. However, aligning resources with strategic goals is still a challenge for several universities, which makes them inefficient and causes them to miss growth opportunities. Liu (2024) focuses on the complex relationship between resource allocation and smart planning, highlighting their main role in promoting sustainability and efficiency of institutions. With case study analysis from Sakarya and Rongo Universities, this study highlights the challenges for higher education institutions in resource allocation and smart planning. In addition, it discusses best practices and viable solutions to guide institutions to explore these complex processes. This study adds practical solutions and valuable knowledge for schools and colleges to survive and thrive in a highly dynamic and competitive landscape of education.

Rosen and Sappington (2016) investigated universities' decisions to issue debt. They tested whether uncertainty of a university's non-financial income and the expected value of the university affect its leverage. It is observed that there is a negative relation between leverage and expected value as well as income uncertainty. The debt of the university declines with a rise in the expected value of non-financial income by around $5.1 million, while rising the uncertainty of non-financial income. It is also found that leverage decisions have not been sensitive to expected income but more sensitive to its suddenness.

Across the world, several research universities operate in a dynamic environment with various missions focusing on the value of effective financial management. Resource allocation is one of the major concerns in budget programs promoting institutional goals of planning associated with socioeconomic relevance and excellence in studies. Hence, managers need to adopt strategies to deal with this concern. Ferrero et al. (2025) addressed the research question of whether institutional planning may promote relevance and excellence in academic units related to the allocation of resources in academic institutions. This study updates on how global universities have addressed this concern and presents a case study collecting data from one of the highly recognized Latin American universities. This study investigates indicators and models of budget

allocation while focusing mainly on policies in the Global South. A novel approach is proposed with mathematical analysis demonstrating the relation between strategic goals in budget programs and the outcomes of each academic institution, while maintaining the specialties of knowledge and missions. With the proposed model, both academic institutions and universities can prefer their indicators. Then, the budget can be used by the university to motivate units to go in the path of the university.

2.1. RESEARCH GAP

Existing studies have investigated resource allocation across universities, institutional funding, capital structure, and financial sustainability in finance related to higher education. However, these issues are treated individually by existing studies, as they focus mainly on financial and borrowing decisions in terms of capital structure, while studies related to allocation have focused on distribution and budgeting of resources. On institutional growth, studies have focused on planning, expansion, partnerships, mergers, or multi-campus development without decisions related to capital allocation.

This study also fills a major gap in the interaction between capital allocation and growth strategy with the evolution of academic institutions to become a large network of institutions. This is especially relevant when significant investment is needed for expansion in buildings, land, faculty, academic infrastructure, administrative solutions, and student services. For this expansion, financial resources may come from retained earnings, surpluses in institutions, donations, borrowing, and partnerships.

2.2. RESEARCH OBJECTIVE

- To investigate the development of capital structure in institutional networks
- To assess how educational enterprises allocate capital in their institutional networks
- To determine the growth strategy adopted by educational enterprises

3. RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

This study is based on an exploratory, conceptual, and descriptive research design, which includes the collection of secondary data to develop a theoretical underpinning of the interaction between capital allocation, capital structure, and growth strategy to transform academic institutions from individual campuses to a whole institutional network.

3.2. DATA COLLECTION

For data collection, credible online sources will be referred to identify patterns in capital allocation, financial decision-making, and network development and to gather information available in the public domain about educational institutions. Some of the reliable online sources for collecting secondary data will be annual reports from academic institutions, strategic planning documents, government reports, articles published in peer-reviewed journals, World Bank and OECD reports, research reports, and credible news sources related to financial decisions and institutional expansion.

3.3.RESEARCH APPROACH

This study adopts an interpretive and comparative approach to detect common relationships and patterns across credible sources and recent literature. This study investigates the influence of decisions in one area on the others. It focuses especially on educational enterprises to balance immediate operational needs with financial sustainability and long-term institutional goals. Finally, this study synthesizes findings from previous studies to determine the transition of capital structure, growth strategy, and capital allocation from single campuses to institutional networks through mergers, technological investment, allocation, and networking for sustainable growth. This approach fulfills the objectives of the study to provide conceptual and theoretical insights on the relationship between capital allocation, structure, and growth strategy in higher educational institutions.

4. RESULTS

4.1. CAPITAL STRUCTURE IN INSTITUTIONAL NETWORKS

Building capital structure is very important in institutional networks across interlinked universities or schools. This process depends on increasing structural, relational, and human capital for resource sharing, quality of learning, and innovation (Adams et al., 1992). In India, higher educational institutions have a lot of challenges to face in leveraging the components of intellectual capital (IC), including structural, human, relational, and innovation capital, along with financial capital, to improve innovation (Yin et al., 2023). Issues like suboptimal practices for managing knowledge and improper adoption of technology affect their innovative ability (Guerrero and Menter, 2024).

There are several institutional gaps identified during the COVID-19 pandemic in digital infrastructure and the need for robust systems for knowledge management (Ammirato et al., 2021; Dwivedi et al., 2020; Abdalla et al., 2022). In addition, the value of innovation and technology is highlighted by the National Education Policy (NEP), 2020. The expenditure on education has been under 4.5% of GDP since 2006-07, while spending on technical and higher education is under 1.5% of GDP. This highlights the need for significant investment in education, such as developing human capital. Over the years, this expenditure

has been rising, with 2.9% in 2022-23 while it was 2.8% in 2019-20 (Guerrero and Menter, 2024) (Figure 1). These figures highlight how important it is to invest in education, highlighting the need for building intellectual capital and human capital to drive innovation and economic growth (Guerrero and Menter, 2024).

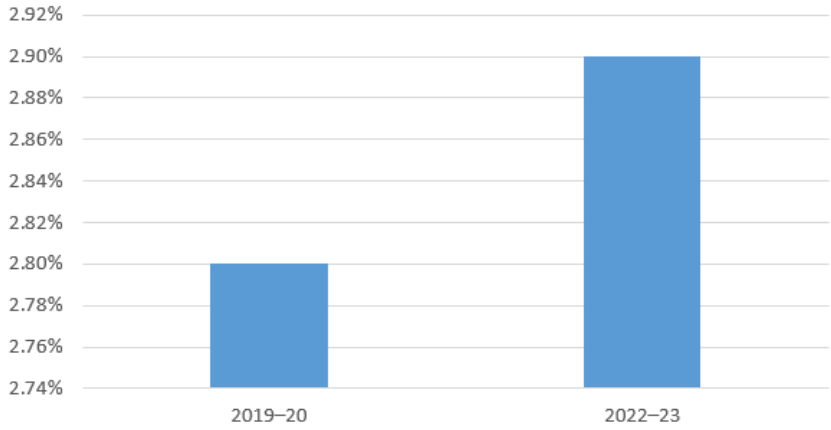


FIGURE 1 Education Expenditure as Percentage of GDP

Source: *Guerrero and Menter (2024)*

Higher educational institutions are constantly identifying the main role of capital in driving competitive edge and innovation in a rapidly growing landscape. Including structural, relational, and human capital, intellectual capital is an important asset of higher educational institutions (Wei et al., 2023), which can improve innovation (Pedro et al., 2019). In India, the education sector is going through a transformative shift based on technological advances and policy reforms to understand the components of intellectual capital (Azamat et al., 2023).

Human capital includes the combined expertise, skills, and knowledge of researchers, institutional facilities, and administrative staff (Ammirato et al., 2023; Serenko, 2024). On the basis of this foundation, innovation and academic excellence are built (Pedro et al., 2019; Iqbal et al., 2019). Structural capital consists of supportive practices, infrastructure, organizational potential and databases to promote effective innovation and functioning (Fiorillo et al., 2020; Truong et al., 2023). Relational capital is based on the relationship between an institution and its stakeholders, such as alumni, industry partners, and other educational institutions (Zahoor and Gerged, 2021; Zhang et al., 2024).

Irrespective of the potential of institutional capital to drive innovation, many higher education institutions find it challenging to leverage such assets. Issues like improper adoption of technology, fragmented relationships, and suboptimal practices for knowledge management affect their potential to stay competitive and innovate (Quarchioni et al., 2022; Rana and Kaur, 2023). These gaps are further exposed by the COVID-19 pandemic, highlighting the need for efficient systems for knowledge management and digital infrastructure (Wang and Wu, 2021).

The higher education system is the foundation for realizing intellectual potential that can be utilized for the nation to the fullest extent, and universities are the drivers for the development of the country (Tirto et al., 2020). Higher education institutions must not only generate advanced knowledge, but also build needed competencies to make intellectual property an asset to the nation (Dzwigol et al., 2020). Intellectual capital, such as competencies, knowledge, reputation, customers, and professional experience of staff in universities, plays a vital role in their development. Achieving further income with unique potential is possible when intellectual assets are the object of attention when it comes to determining directions of growth (Prokopenko and Selevich, 2016).

In the external environment, improper response is the development and formation of universities with foreign and domestic experience as subjects of market relations and being included as the most important aspect of the innovative economic sector (Kholod et al., 2020). Forming models of innovative universities and research is one of the primary paths of modernizing higher education, enabling universities to perform their roles more effectively in the knowledge economy. Target setting is a feature of those models where education and science meet. As per the university's development model, the specifics are specified in its intellectual capital.

The knowledge economy increases the need for the education system significantly (Ponomarenko et al., 2018). In the education system, the knowledge an individual gets is no longer a constant value. It is merely the foundation that needs refinement, improvement, and superstructure in the knowledge economy. Constant training, advanced training, and retraining are needed in the knowledge economy (Tkachenko et al., 2019). Figure 1 illustrates new requirements in the knowledge economy.

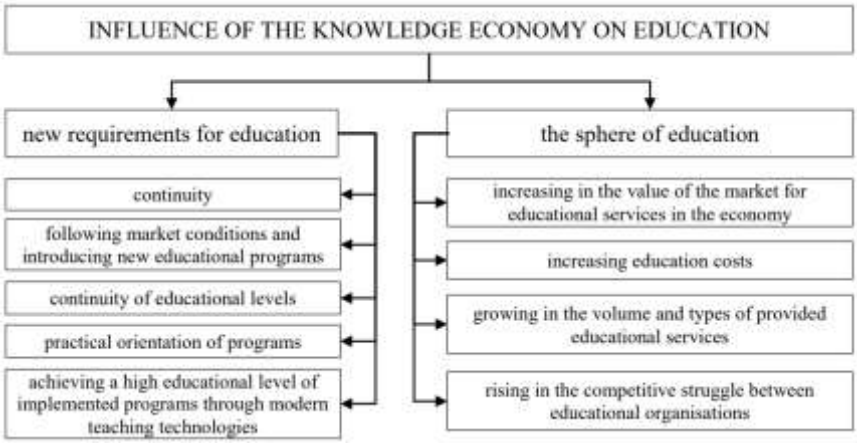


FIGURE 2 Impact of Knowledge Economy on Higher Education

Source: *Yarish et al. (2021)*

High competition in education requires a new strategy in educational services. The processes of integration consist of both various levels of education, forming a constant chain of education, and the creation of innovation, research labs, scientific innovation, and techno-parks in educational institutions to commercialize practical implementation and achievements (Kisiołek et al., 2020). In essence, production, science, and education are part of integration. This way, the main tasks of the state are highlighted to build a knowledge economy. The dissemination of knowledge and production is organized with improved efficiency in services and manufacturing; the relationship between manufacturing and education is formed, along with a network of institutional support for building innovation.

A knowledge economy cannot be built, and an economy cannot be developed without accumulation, creation, and reproduction of knowledge, and large-scale application for scientific, technical, and economic changes. Hence, the new economy should be developed by the state's efforts in three key areas identified in Figure 2.

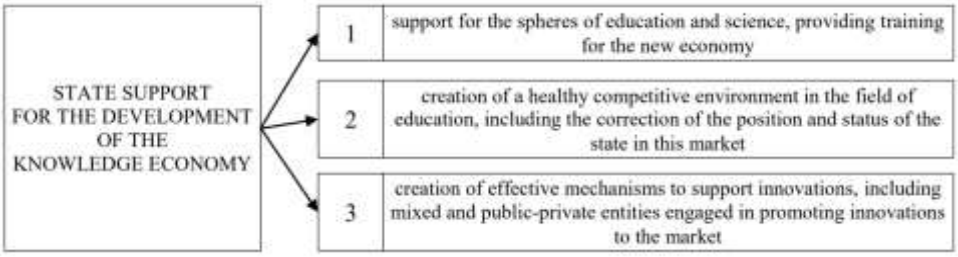


FIGURE 3 Ways to Provide State Support for Developing Knowledge Economy

Source: *Yarish et al. (2021)*

As the education sector is an important element of the knowledge economy, it should be both a source of intellectual capital and a determinant of global competitiveness in the country. In global competition, one can become the leader both in the generation of knowledge and in its mobile and broad distribution with international education systems. The education sector acts as an instrument for effective application, distribution, and creation of competencies and knowledge in the knowledge economy (Yarish et al., 2021).

Developing financial structures in educational institutions combines student fees, public funds, debt financing, and social activities to expand facilities, sustainable operations, and growth across campuses. On educational financing, global knowledge highlights the management and allocation of resources across institutions. Educational financing includes collection, management, and allocation of resources in societies to support lifelong learning and education. It reflects making social and political decisions on investing in manpower, translating priorities of education into sustainable financing. It also relies on large-scale financial context, such as the ability of countries to manage public funds, generate revenue, and retain sufficient financial space for investment.

The financial process consists of legal frameworks, governance, mechanisms, policies, and administrative policies to define raising and distributing resources. Funds are allocated by governments to various types and levels of education and to certain groups or areas. Distribution of resources significantly affects the equality of opportunities. Education is not an expense. It is an investment that transforms the economy. It is among the smartest investments made by a country for the long term, not only for achieving the SDG 2030 agenda, but also to advance growth across all SDGs. Equitable and proper financing encourages

the education system to build innovation, resilience, and inclusion, enabling communities and people to adapt to complex issues and play a vital role in sustainable growth.

Education plays a vital role in poverty reduction by promoting gender equality, health, promoting institutions, and driving financial growth. Annual earnings can be improved by 10% for each extra year of schooling by 10%, while every dollar can give return of around 15 dollars when invested in education (Patrinos, 2023; UNESCO, 2023). Extreme poverty has been reduced by around 40% since 1980. Over 200,000 deaths related to disasters could be prevented in the next 2 decades with complete secondary education for everyone by 2030 (Muttarak and Lutz, 2014; Gethin, 2023). Global GDP could be improved by 23% when gender gaps are filled in both the workplace and education (Ostry et al., 2018). In 2015, the international community recognized those benefits and committed to allocating around 6% of GDP and 20% of expenditure on education, according to the Incheon Declaration (2016).

In order to meet those commitments, domestic tax systems must be strengthened to improve spending and use innovative systems in financing, such as employee and social contributions, to promote public education. Restrictions should be addressed in public finances in several countries, such as the burden of high debt affecting resources for educational investment in the long term. Measures like debt-for-education and sustainability swaps can generate added financial space. Today, the foundation has been laid by investing in education for more peaceful, equitable, and sustainable societies in the future. It is both a strong driver for growth and a challenge for public finances.

In education, financing is unequally and insufficiently distributed, which poses a risk to sustainable growth and SDG 2030 SDG Agenda may go off track. By 2030, only 17% of those goals could be fulfilled. Sustainable Development Goal (SDG 4) is already delayed and is facing multiple challenges of relevance, quality, inclusion, and equity, which focuses on equitable and inclusive quality education. Education is important to achieve all goals, but there is insufficient financing. There is around US$97 billion of financial gap every year in poor countries to meet their targets of SDG 4 by 2030. While developed nations are spending around US$8500 per year for each student, poor countries are spending only US$55 (UNESCO, 2024) (Table 1).

TABLE 1 Contrast in Yearly Spending Per Student between Developed and Poor Countries

Indicator of Investment	Developed Countries	Third-World Countries	Difference
Yearly spending per student	US$8500	US$55	US$8445
Spending ratio (developed-third-world country)	154.5	1	153.5

Financial space is further restricted by debt pressures. Public spending exceeds academic research in poor countries, as they spend around 4 times more on debt. Currently, around 113 countries are spending heavily on debt service compared to education. There is a high cost of inaction for developing and poor countries to invest in education. Over US$1.1 trillion is spent every year by governments because of high dropout rates, and US$3.3 trillion is spent on children without foundational skills. Existing students could face losses of lifetime earnings of US$21 trillion (UNESCO, 2026).

Usually, financial education has added many challenges. Countries should invest in achieving their education-related goals and use limited resources efficiently. They need to strengthen mobilization of domestic resources, improve public finances, explore innovative approaches and expand financial space for the benefit of society. UNESCO's global action of UNESCO focuses on the quality, resilience, and equity of education systems to enable nations to meet their SDG 4 goals. It consists of acting as a lab of ideas to produce tools, guidelines, and research on quality education for long-term learning, such as early education and childhood care, digital learning, and adult learning.

Peer learning, exchange of knowledge, and promoting global policies on financing solutions and challenges. Efficiency can be improved with multilateral alignment and cooperation to scale up funding for society. Additional funding should be scaled up from both global and domestic sources to expand the financial space of countries for academic investments. Knowledge repositories should be built on innovative financial systems, best practices and global and national commitments. Capacity building and direct tech support should be provided to nations to improve public finance and costing exercises.

Simulation models can be used by countries to design more sustainable solutions for academic financing with the use of data for testing policies before being adopted in real time. With the simulation of alternative situations, including reform of teacher recruitment of teachers, increasing access, or changing investment priorities, nations can detect risks, assess trade-offs, and understand reforms. This way, education goals can be aligned with projected and available resources to reduce or avoid financial gaps, which may weaken implementation of policies. Education simulation frameworks introduced by UNESCO are based on global standards to support decision-making around different policies, i.e., from costing and planning to monitoring. This way, nations can design realistic, sustainable, and practical capital allocation strategies (UNESCO, 2026).
Table 2 illustrates the crux of quantitative insights into overall investment in education and its benefits, which are not limited to academic performance. It is found that annual earnings have been increased by around 10% with each extra year of schooling. There is $15 of return on investment of every $1 invested. Global GDP could be increased by around 23% at the

macroeconomic level by filling the gender gap in employment and education. On the other hand, there is a significant financial cost of improper investment in education, such as over $1.1 trillion a year and around US$3.3 trillion related to a lack of basic skills in children.

TABLE 2 Social and Economic ROI from Education

Economic Indicators	Reported Value
Possible growth in global GDP with reduced gender gaps	23%
Growth in annual income for each schooling year added	10%
Extreme poverty reduced since 1980	Around 40%
Estimated ROI for investing each $1 in the education sector	US$15
Annual expenditure due to high dropout rates	Over US$1.1 trillion
Annual expenditure because of lack of basic skills in children	Over US$3.3 trillion
Possible losses of lifetime earnings for students	US$21trillion

Source: *UNESCO, 2024; 2026*

4.2. CAPITAL ALLOCATION IN EDUCATIONAL ENTERPRISES

Capital allocation refers to the strategic distribution of financial resources of an organization by its executives to increase shareholder value and efficiency. It consists of giving priority to investment opportunities, i.e., from growth to debt management for maximum returns. Effective capital allocation can mean success of an organization to excel with strict financial management. With these decisions, both businesses and investors can make informed decisions related to the generation of value in the long run. In this age of rapid expansion of technology, capital allocation has been a major driver of expansion. Capital allocation has become a part of different sectors altering traditional techniques and strategies. In educational enterprises, capital allocation refers to strategic distribution of human, physical, and financial resources to manage overall growth, sustainability and learning in the long term (Olofin, 2025).

Education is the source of skills, knowledge, values, and attitudes needed for students to understand the world and explore their complete potential. Students can become responsible citizens with education and become part of society and the workforce as a foundation for their personal and social growth (Folorunso and Adebayo, 2018). Along with personal growth, education is important for society as it promotes creativity, critical thinking, and rationality, and enables people to make informed decisions. Education is a tool to achieve long-term economic and social growth, along with personal fulfillment, to promote democracy, equality, and peace in the world (UNESCO, 2016).

Education is a deliberate and mindful undertaking to form an environment of learning to build the potential for learners to achieve self-control, intelligence, personality, skills, and noble character for both themselves and society overall. In the education sector, capital allocation is needed to achieve quality learning. Capital allocation involves infrastructure, funding, study materials, and faculty support to improve the standard of education (Ogunode and Musa 2020). Infrastructure is another important element to allocate resources in education, which involves all the basic amenities like electricity, clean classrooms, and sanitation.

Capital allocation is important in educational institutions to achieve a goal, operate and complete a project. Resources are everything that is used to promote, support, acquire, and transmit knowledge, either directly or indirectly (Ekundayo, 2015). Resources are essential inputs required to sustain activities and produce services. The availability of resources impacts the nation and societies. They are vital for academic growth, economy, and innovation. Capital is one of four categories of resources, along with natural, information, and human resources. Information is itself a form of capital in this day and age, as it can improve output and innovation in terms of technology and knowledge.

Capital is an artificial resource which includes machinery, buildings, and infrastructure for educational institutions. Human capital includes expertise, labor, and people's ability to contribute. Natural capital is needed for both extension of life and economic activity, such as water, land, energy and minerals. Educational resources include tools, materials, and services to promote learning, teaching, and research in academic institutions. Educational resources are supplies, support networks, and instruments to improve learning outcomes. They provide needed inputs to foster knowledge, skills, and engagement. Educational resources include digital, financial, physical and human resources. Physical resources are classified into desks, textbooks, laboratories, chalkboards, libraries and other objects to promote classrooms.

Digital resources include software for education, computers, online courses, and digital tools to provide interactive and flexible learning. Human resources include instructors, teachers, staff, and mentors. There are several factors important for the quality of academic experience, such as proper seating, well-maintained facilities, lighting, and ventilation (Kibuthu, 2016). However, in many schools, improper infrastructure affects access to a quality learning experience for students and affects their motivation to learn. There are different materials included in educational capital to promote an efficient learning atmosphere, including textbooks, smart classes, teacher support, and other facilities (Thomas, 2016).

Existing studies widely explore the major effect of innovation on improving capital allocation (Dou et al., 2023). Human capital allocation can be optimized well with digital innovation through different complex systems. First, technical skill needs can be increased with digital innovation in the job market. With the integration of digital technologies across different aspects of operations, there is a rise in demand for skilled employees (Buck et al., 2023). This shift in technology attracts companies to adjust and reconsider their internal composition of skills to create more specialized and technical teams.

In addition, there are plenty of opportunities for retraining and skill development with digital innovation. Higher competence levels are needed from staff to implement digital technologies. Here, training and education play an important role in improving productivity and skills, as per human capital theory (Xiao et al., 2024). With the rise of virtual training and online learning, new skills can be acquired easily while strengthening existing skills (Dinlersoz & Wolf, 2024). Along with this, more complex roles can be prepared to ensure competitiveness in the ever-rising digital environment and reduce skill gaps (Buck et al., 2023).

In addition, innovation and constant learning are developed in educational institutions with digital innovation. By promoting a healthy environment, students can engage in experimentation and technology to sustain a competitive position later in life (Sumbal et al., 2024). Along with top talent, this culture can seek personal growth and innovation to improve talent retention and optimize allocation of human capital. Overall, opportunities may be provided by increasing standards for technical skills and building a culture of innovation and learning. Effectively, digital innovation promotes the allocation of human capital to build a robust foundation for human resources for the long-term growth of an organization.

Optimizing allocation of human capital is very important to promote equitable allocation of workforce. First, with the improvement in human capital allocation, there is a rise in skill premium in the job market. Bargaining power among workers increases with higher skills, resulting in high-skill, high-paying jobs, while low-skill positions are eventually being automated, such as codable, repetitive, and simple roles (Acemoglu & Restrepo, 2019). These shifts are helpful for employees with favorable positions in the job distribution (Bental & Demougin, 2010). In addition, optimized allocation of human capital motivates organizations to focus more on innovation and skills to improve compensation.

Skill-based pay plays a vital role in changing the distribution of income aligned with marginal growth in economics. The higher needs of high-skilled employees cause a bigger share of income distribution for the workforce because of their major roles in productivity and specialized skills. Finally, the allocation of human capital generates more jobs where creative and cognitive skills are needed, which are not vulnerable to automation, providing job security and higher wages. It increases the status of labor in the distribution of income and creates conditions for employees to engage in and benefit from the process of innovation.

In addition, the workforce can be aligned strategically with an increased number of professionals with advanced knowledge and education to improve the adaptability and dynamism of the job market to meet the complex needs of the modern economy, so that the workforce stays at the core of economic growth and progress. Overall, digital innovation drives allocation of human capital to both improve bargaining power and skill levels of the team, while reducing the risk of replacement due to automation by generating more rewarding and high-skill jobs.

In the education sector, capital allocation is the foundation of providing equal resources to increase the chance of success for students to meet their personal needs, ensuring fair distribution irrespective of their economic, social, or cultural backgrounds. Capital allocation in educational institutions is an ideal goal to break the cycle of poverty, promote social justice, and social mobility, where everyone can thrive and succeed. In the past, the education system has added disparities, where there is a direct influence of resource allocation on the quality of education received by students. These resources consist of teaching, funding, study materials, and facilities to build the foundation for education and shape factors like effectiveness in teaching, classroom sizes, access to support systems, and extracurricular activities.

Even resource allocation can act as a substance for academic brilliance to ensure reaching full potential irrespective of financial backgrounds. However, there are plenty of challenges ahead of capital allocation in educational enterprises. It is not sufficient to identify differences in the allocation of resources. Targeted strategies should be implemented and designed to address those problems to reallocate resources effectively to underprivileged areas. This section explores how strategies can be developed for resource allocation to achieve academic equality, while focusing on nuances and complexities. It also explains how various strategies of capital allocation can affect academic outcomes of students from different backgrounds, and it discusses strategies ideal for encouraging equitable access to the best sources of education.

The concept of capital allocation is based on the theoretical foundation of social justice, which supports the just and fair distribution of resources in society, including opportunities for education. The principle that capital allocation is both structural and moral, and needs to address systematic gaps, is highlighted in the introductory works of theorists like Rawls (1971) and Gewirtz (2001). According to educational equity, all students should be able to access the same opportunities for success,

regardless of cultural, socio-economic, or geographical background. In this principle, the "justice as fairness" concept by Rawls is aligned with capital allocation, and it should be placed to fulfill needs.

Rawls (1971) introduced the concept of the "difference principle," which enables inequalities only after improving the position of the most deprived, and it is a vital theoretical foundation for examining the role of allocation of resources to achieve equity. The argument is that education systems can reduce existing economic and social disparities to ensure that they don't intensify or preserve past inequalities (Rawls, 1971). In education systems, capital allocation has been covered widely as it is directly related to academic outcomes. Hanushek (1992) highlighted the significance of resource efficiency, arguing that just increasing the study materials without a proper plan may not improve study outcomes.

The critique of Hanushek highlighted the need for an in-depth approach to allocate resources, considering both the number of resources and efficiency in improving overall performance of students. This difference is important as it suggests that well-distributed resources like proper funding, qualified teachers, and updated facilities have a greater influence on student success than the mere presence of abundant resources. Reckase (2003) further explained the significance of capital allocation. It is argued that disparities in the distribution of resources often create major differences, such as uneven funding. He focused on systematic changes that are highly evident among students from rural areas.

Findings of Reckase are aligned with the belief that reasonable resource allocation, especially to underfunded institutions, can cause improved educational outcomes and enhanced academic equity by extension. This argument is extended by Lee and Smith (2006) by providing empirical evidence of changes in the allocation of resources around schools. There is also a robust correlation between the distribution of resources and socioeconomic status. It is confirmed that schools are resourced well in more affluent areas and provide excellent academic experiences in comparison to schools in rural areas. It highlights targeted interventions needed to reduce those challenges. Policies are needed to meet specific needs to have a sensible effect on equity.

Another important factor to address the problem of academic inequalities is teacher distribution. According to Rivkin et al. (2005), teacher quality is among the major factors in students' achievement and equitable allocation of well-qualified teachers across schools is needed to encourage academic equity. In poor areas, it is found that schools are usually operated with less qualified or experienced teachers, resulting in a persistent gap between high-income and poor students. Hence, strategies based on equal allocation of teachers can be very important to minimize disparities in academic outcomes.

Having local communities in the process of decision-making is also important to ensure allocation of resources to reflect specific community needs. According to Foster (1999), community input is needed for allocation of resources, and it ensures more effective and responsive use of resources. Along with empowering societies, this approach also ensures that capital allocation is aligned with different academic needs. It adds a sense of shared responsibility for the success of reforms to promote more sustainable improvements.

Finally, resource allocation can be evaluated and monitored to determine its efficiency and ensure efficient use of resources. According to Baker (2014), policymakers can evaluate inefficiencies regularly and alter strategies to ensure constant alignment of resources to attain academic equity. Academic institutions can track decisions of resource allocation to make changes to improve outcomes with robust monitoring.

4.3. GROWTH STRATEGY IN EDUCATIONAL ENTERPRISES

Education is one of the most important pillars of growth of any economy. It is part of the Sustainable Development Goals (SDGs) 2030. However, consistent training is needed to stay competitive for professionals. To be specific, AI and automation have increased transformation in education in the post-COVID era, redefining the game rules in the corporate and educational world. Educational enterprises include different types of organizations like universities and private colleges, EdTech platforms (like Udemy, upGrad, etc.), publishing houses, training centers and academies (teaching languages and helping students to prepare for exams), and traditional schools and colleges.

Generally, these enterprises aim to combine educational approaches with business models to make money, while contributing to education. Hence, educational enterprises are important for providing training that is more adaptable and varied to meet personal needs. It is definitely an incentive for individuals to invest in personal growth and education. Additionally, they innovate in teaching to enhance competitiveness in the market. For educational enterprises, here are some of the growth strategies identified in this study.

4.3.1. DIGITAL TRANSFORMATION

Digital transformation refers to the process of integrating technological innovation to drive major change in different organizations (Wessel et al., 2021). This process consists of different approaches like big data, AI, IoT, cloud, and cyber-physical solutions (Klingenberg et al., 2021). These technologies help in analyzing, collecting, and interpreting data in real-time by working in synergy to promote automation, decision-making, and improve the efficiency of the process (Mohamed

Hashim et al., 2022). In digital transformation, rapid advances have fueled the interest in encouraging organizations to adapt to stand out (Verhoef et al., 2021). In addition, digital technologies are integrated to improve customer experience, operational efficiency, achieve a sustainable competitive edge, and innovate business models (Correani et al., 2020). Increased flexibility, agility, and responsiveness to meet demands are some of the possible benefits that have gained a lot of attention (Schallmo et al., 2017).

Digital transformation keeps higher education enterprises ahead in competition (Benavides et al., 2020). While there is a high recognition of digital transformation in higher education enterprises, caution is needed when adopting these strategies to make plans that both improve competitive edge and improve the ecosystem in higher education institutions (Herri et al., 2019). There are several challenges, such as failing to prioritize projects, internal resistance, making decentralized decisions, and a lack of digital literacy among employees (Alenezi, 2021). In addition, vision, commitment, and capacity required for proper adoption may be misaligned due to limited resources, unclear strategy, competing priorities, improper agility in the organization, and improper leadership (Sánchez, 2020). Mismanagement can affect the data security, privacy, and profitability of educational enterprises (Alhubaishy and Aljuhani, 2021).

4.3.2. INTERNATIONALIZATION

Even though achieving educational outcomes validates the efficiency of the education system, preparing students with relevant skills is more important in the end. Irrespective of increasing literacy, numeracy skills, and academic achievements in most OECD countries, the majority of the adult population has limited skills. Governments are constantly comparing education systems globally when developing policies to improve economic and social aspects of people, to provide incentives in schooling to mobilize resources to meet increasing demands. Well-qualified teachers are needed for an efficient education system, but it becomes more challenging to retain well-deserving teachers due to a shortage of teachers. While almost all open positions can still be filled, most educational institutions don't attract candidates who are highly qualified (OECD, 2025).

4.3.3. MERGERS

With increased competition in terms of research and development and services across countries, universities are constantly pressured to both collaborate and compete. Higher education institutions compete for fast learners, financial resources, excellent teachers, high-quality lecturers, good status and reputation, along with high scores in global rankings. A highly competitive international market is a major factor in mergers for several educational enterprises. Other strategies consist of joint ventures, informal collaboration, national, regional, and global networks, strategic alliances, along with cross-institutional mergers of service and academic departments (Harman and Harman, 2008). University mergers are a major practical and theoretical challenge. Irrespective of several practical examples of mergers across the world, there is a lack of frameworks to manage mergers in terms of educational enterprises.

Strategic mergers combine multiple organizations into one to meet external challenges effectively, as they are planned deliberately (Harman and Harman, 2003). Strategic mergers refer to strategies to merge universities for mutual development in terms of higher education (Martin and Samels, 2002). To merge two institutions, terms like consolidation, mergers, fusions, takeovers, marriage and buy-outs are used. Irrespective of fact that these terms must not always be considered synonymous, they are usually used together. One company takes over another company in a merger, including all the liabilities and assets. In consolidation, multiple organizations are merged to form one large company. All of the liabilities and assets of each company are owned by the new firm. After the same process, mergers are the ways to merge companies to use the terms "consolidation" and "mergers" in relation to mergers of universities together.

4.3.4. NETWORKING

In the field of higher education, activities like quality assurance, digitalization, joint programs, and academic development are highly performed in university networks (Rocha et al., 2018; Williams, 2017). Initially, this development can be observed as a paradox since the main approach is widely influenced by the new paradigm of public management (Ferlie et al., 2008). It means educational enterprises have to work as competitors. With a view to relationships between universities, competition instead conceals their weaknesses, improvements, and strategic needs.

On the other hand, effective marketing assumes openness of partners about improvement needs and weaknesses in terms of previous experiences that are made by institutions, which might be helpful for other partners. However, networking can be convenient at second sight. Collaboration is important even in a competitive market because of individual profiles that should be developed by universities. Some institutions are known to be better in digitalization, while others find it challenging to progress faster than others to fulfill the needs of a diverse population.

This way, university networks increase mutual benefits for all partners. Everything doesn't have to be developed from the beginning. The network is more than its parts. Mutuality poses certain challenges in implementing the network when motivation is highly limited to make the most of partners, as recommended by the rational decision-making factor (Becker, 1976).

5. DISCUSSION

In the case of educational enterprises, implementing mergers should fulfill the goals and mission of strategic goals associated with improving research (Di Berardino and Corsi, 2018). There was a departure from the traditionally formed university in the second half of the 20th century (Clark, 1998). It is highly visible that universities use economic solutions and logic developed in the area of management, especially in private and public universities. Commercialization of R&D, competition, and the socio-economic environment are major factors for mergers. There is a rising globalization and internationalization of universities to form complex networks, and universities often compete for students and researchers with global cooperation. Universities face similar challenges and start to resemble units (Sułkowski, 2016).

Recruitment in the education sector is made more complex due to high teacher turnover. Around 1-3 percent of teachers retire every year in the majority of countries. However, there are different reasons for the majority of teachers leaving, along with retirement. Along with contractual work and working conditions, it is also influenced by career mobility and the context of the national job market. A constant level of hiring is needed, as around 10% of teachers resign every year in Estonia, England, and Denmark. Only 1% of teachers in Ireland, Greece, and France resign every year, which affects workforce renewal (Figure 3). Shortages can be lessened with second-career teachers while bringing wider skill sets to the profession. It is not sufficient to provide access to tertiary education if programs are not completed by students (OECD, 2025).

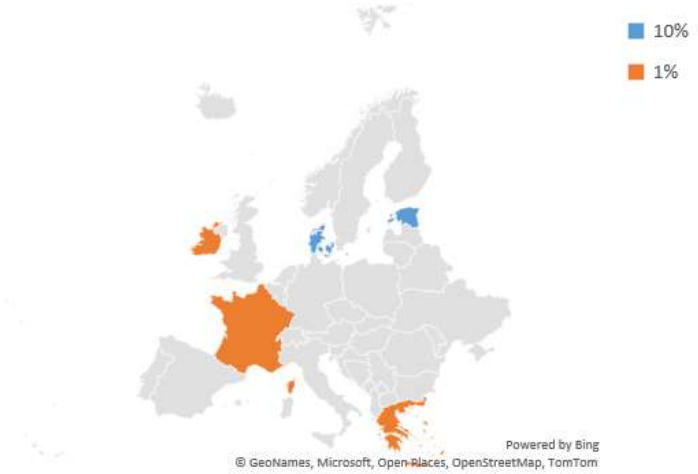


FIGURE 4 Annual Global Resignation Rate of Teachers

Source: *OECD (2025)*

There are different causes of low completion rates, such as program content and expectations of students being misaligned, social and academic support being limited, financial barriers, and improper preparation for demands. Completion rates can be improved with policy interventions like career guidance in secondary education, along with specified tertiary care programs with well-defined courses and measures to provide progressive guidance after graduation. Along with this, giving credentials to people for specific skills can show their capabilities to their employers (OECD, 2025).

Higher education can connect emerging technologies to automate processes, improve performance, and adapt to an innovation-driven society (Wadim and Yu, 2022). Higher educational institutions have preferred this shift after identifying the major role of innovation in promoting collaboration, efficiency, and minimizing errors and costs in managing educational needs (Alenezi, 2021; Demartini et al., 2020). The rise of EdTech is driven by digital transformation in the education system and administrative roles, intensifying competition with increased flexibility, mobility, and overuse of smart platforms (Renz and Hilbig, 2020). Higher educational institutions are impacted by these transformations, creating a positive environment with new models, while it is important to adapt to this change to stay relevant (Zulfikar et al., 2018).

4. CONCLUSION

It is highlighted in the study that there is a need to understand the growth of universities as a process to involve the relationship between capital allocation, institutional growth, and capital structure. Educational enterprises constantly operate with technological advancement, increased operational expenses, the need for faculty and students, and growing expectations about educational quality. On the other hand, one cannot consider financial resources separate from operational goals. In this study, it is highlighted that existing studies have investigated resource allocation, capital allocation, and institutional networks as individual areas, while there is limited attention given to the relationship during transformation.

Financial resources can be translated into institutional growth in educational enterprises as the core paradigm of capital allocation. Resources may be assigned to achieve technology, faculty, academic institutions, administrative solutions, and

student services. Effective allocation of resources needs a balance of operational needs with investments in the long term. This process can be supported further with digital transformation by improving decision-making, efficient operations, resource usage, and knowledge management. However, there is a need to prioritize technological investments carefully, as inefficient technology, regulatory resistance, and financial resources can minimize the efficiency of transformation.

It is further established in the study that there are different paths for institutional growth than with actual expansion on its own. Growth may be pursued by institutions by adopting institutional networks, new campuses, alliances, mergers, and internationalization. The study especially suggests that mergers can help universities to share resources and competencies, while diversified offerings and transformation can help institutions to increase their reach without depending completely on infrastructure. Mutual benefits can also be provided by university networks, as enterprises don't have to build potential individually and can share their technology, experience, and academic knowledge.

Overall, it is found that sustainable growth relies both on allocation of capital and gathering more investment as per growth options and institutional priorities, along with just achieving more capital resources. From a single campus to networks, the transition of educational enterprises needs a combined approach to align finances, technology, capital allocation, and partnerships and alliances together. For expansion, financial resources may come from surpluses, retained earnings, partnerships, and donations. Whether each source is suitable relies on risk exposure, financial potential, and the long-term goals of the institution.

This way, academic institutions should balance academic quality, financial resources, operational efficiency, education quality, and competitive edge. Along with increasing institution size, expansion should also be focused on institutional decisions to improve contribution to overall outcomes, academic quality, efficient resource use, innovation, and sustainability in the long run. Hence, this study provides a theoretical basis to understand the combination of capital allocation and structure in universities with proper growth strategies.

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