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Choice Architecture in Higher Education: Experiences and Trends in India – An Institution based Case Study

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ABSTRACT

This study examines elective course selection trends under India's Choice-Based Credit System (CBCS) at an autonomous arts and science college from 2013 to 2023, aligning with SDG4's goals of inclusive education and creative development. Using secondary data and stream-wise analysis across Languages, Humanities, Sciences, and Commerce, the study found that 51% of postgraduate students chose science electives (e.g., Life Sciences) despite being non-science majors, motivated by career prospects and curiosity. Undergraduate students favored interdisciplinary combinations, such as Humanities & Mathematical Sciences (accounting for 5% of choices). However, college norms, such as the "Science to Sciences" policy, partially constrained cross-disciplinary exploration—yet 44% of Language students still opted for courses outside their stream. The findings highlight CBCS's effectiveness in fostering interdisciplinary learning while demonstrating the influence of institutional policies and emerging fields, such as biotechnology, ultimately supporting NEP 2020's vision for adaptable, skill-focused education.

1. Introduction

Programme structure integrated with elective courses or interdisciplinary courses provides a radical way of enabling students to connect explicitly across disciplines. Connecting the core with a range of options enables students to move beyond boundaries and address complex problem-solving skills in real life. Venturing the cross-cutting curriculum throughout the degree programme strengthens stakeholders at the local, national and international levels. The innovative opportunities provided by optional courses address the need for interplay between the main discipline and others. A better understanding is made possible by their synergistic interaction. In addition to intellectual linkages and discoveries, linking across disciplines draws out universal and ethical responsiveness. Together with internalised digitally connected frameworks, they are even more flexible and permeable than they were at the beginning of the century. Students can thus acquire the adaptability required for a social, economic, and global environment that is rapidly changing by gaining knowledge from more than one discipline (Fung, Dilly 2017).

Human capital theory (1962, 1992) propounds that universities offer diverse set of courses along with on-the-job experience. Knowledge is mastered if it is instantly related to a practical problem laterally with major specialisation. Learning and practice complements each other. When the advantages of further education outweigh the expenses associated with obtaining it, prospective students make the logical decision to invest in it. According to an Austrian school member, Hayek (1967), constructivist rationalism indicates that people decide on a course of action only after carefully weighing the alternatives and circumstances on potential course of action.

Such arguments give rise to the idea of limited rationality in decision-making. David Moshman (1990) defined rationality as the self-reflective, deliberate, suitable coordination and application of legitimate reasoning in the formation and justification of ideas and actions is known as rationality.

Robinson (2011) explored the shift in curriculum in United States universities and colleges. The results reveal that as colleges and universities expand in terms of enrollment the choice in the curriculum increases. Intially, private universities had more choice options than public universities, but the difference dissippated overtime. The hallmark finding was that the universities were responding to the larger institutional logic and resonance of students as individuals. This was an illustration of the cultural effects of changing insitutionalised social models. Hedges et al. (2013) specifically designed their study to improve understanding of the factors that contributed to student module choices. In order to improve the range and quality of their modules, business school departments should try marketing, shaping, and describing the module in a way that encourages student herding behaviour (i.e., network or peer effects) and convincing the timetabling staff to schedule the module at a time that works best for the greatest number of students. When these problems are resolved, the lecturing staff could continue to support students' intrinsic motives even though for some students they appear to be the deciding factor in module selection. The role of both financial and non-financial factors in explaining French students' educational decisions was examined by Rapoport and Thibout (2018). The findings indicated that, with the exception of industrial courses, gender factors were weak and unimportant. Expected wages for girls consistently had negative, negligible, and small marginal effects. On the other hand, for boys, in nearly every circumstance, the direct marginal effects of predicted earnings were positive and significant. Consequently, it was determined that boys made more decisions based on predicted salaries than did girls. Al-Taher et al. (2022) attempted to analyse the

student's perspective on doing elective coursework, which was a part of the final year medical school in Jordan. Students preferred pursuing an international elective rather than a national one. International experience paved the way for their self-development and professional development in a global context. General satisfaction was an indicator of the success of the course. Callender and Melis (2022) assessed the influence of student funding policy changes on prospective college student's selection of higher education institution and field of study by aspiring college students in England. The results of the study demonstrated how the students' choices were influenced by their social and cultural capital, financial constraints, self-exclusion tendencies, and social judgments.

The mechanisms behind students' search processes and how students navigate and choose among the many courses offered by the institution are the two main study concerns that are addressed by the theoretical and empirical examination. But this study will attempt to address from the supply end of CBCS, whether there is diversity in the students choices.

Higher Education in India

The first commission on education to be constituted following independence was the University Education Commission, which was founded in 1948–1949. Although it focused mostly on higher education, it also touched on matters pertaining to schooling. The Commission suggested that the intermediate examination's admission standard be the same for university courses. According to the statement, urgent reforms are needed in secondary education as it continues to be the weakest link in our educational machinery. The Kothari Commission (1964–1966) was formed to offer India a coherent education policy that articulated the majority of Nehru's main ideas and drew from his Mission. It acknowledged higher education's role in promoting social transformation while stating that its main objective was to satisfy the demands of business and other sectors. In addition, it promoted the restructuring of the educational system and the use of a "manpower approach" to address the enrolment problem. The National Education Policy 1968, resulted from the Kothari Commission's recommendations, was a pivotal moment in independent India's history. It sought to strengthen national unity, promote national development, and cultivate a feeling of civic duty and common culture. Although the National Policy 1968 included several useful suggestions for the future, it was unable to be properly executed due to lack of a thorough implementation plan. The existing educational system was examined by the Indian government in 1985, which outlined the 1986 policy "Challenge of Education: A Policy Perspective". India's new approach to education was created with the 21st century in mind. As stated in the policy, India's educational system is currently at a crossroads; neither the current rate of improvement nor its typical linear growth can adequately address the demands of the environment. This highlighted the need for reform. The primary objectives of the 1986 program were the development of privatisation and the ongoing emphasis on science and secularism. Under the leadership of Acharya Ramamurthy, the government established a review committee in 1989 to assess the success and progress of National Policy on Education 1986. "Towards an

Enlightened and Humane Society" was the title of the Ramamurthy Committee's 1990 report. In 1992, the Ramamurthy Committee's recommendations were taken into consideration when another committee headed by Janardan Reddy was constituted by the government. The Committee's findings served as the foundation for the revised National Policy on Education, and the 1992 Programme of Action was developed as a practical programme.

Education has been viewed differently under the State's neoliberal economic strategy since 1991. Education was described as a "non-

merit good". The officials believed that higher education's "social rates of return" were insufficient, and subsidising it would only help students who were already well off and would not genuinely advance egalitarianism. State involvement and financial backing began to decline (egyankosh).

In 2009, the National Knowledge Commission was founded with the goal of addressing 21st-century educational challenges. It wasn't precisely an education commission because its goal was to propose a framework for the quality, equity, and access to higher education. Aiming to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030, India embraced Sustainable Development Goal 4 (SDG4) since 2015. The entire educational system needs to be restructured to encourage and promote learning in order to achieve it. The National Education Policy (NEP) 2020 proposes the revision and revamping of all aspects of the educational structure, including its regulation and governance, in order to create a new system that is in line with the aspirational goals of 21st century education, including SDG 4, and India's traditions and value systems. It places particular emphasis on the development of each individual's creative potential, encompassing social, ethical, and emotional qualities in addition to cognitive abilities (both "foundational capacities and higher-order cognitive capacities," such as problem solving and critical thinking).

Significance of the Study

The higher education platform provides students with the option to learn in "multi-dimensional" ways that go beyond a conventional lesson plan. Elective courses are planned to enhance and strengthen knowledge, facilitate academic study and increase student involvement in scientific research. Additionally, a choice-based credit system is said to be a model that retains its fundamental status while giving students freedom in course selection. In order to uncover interests and skills for one's own professional career and nurture knowledge as a result of one's own decisions, a student must carefully choose the optional course.

A comprehensive analysis of the rational choice of electives, whether it is based on long-term or short-term ambitions from the supply-side will give guidelines to all departments irrespective of their area of specialisation. This study will attempt to address from the supply end of CBCS, whether there is diversity in the student's choices.

Choice-Based Credit System in the Study Institution

Lady Doak College was founded in 1948 as a prestigious first women's college in South India. With a well-rounded moral, social, and spiritual perspective, the institution seeks to transform women in a healthy way. Since 1978, the college has been one among the nation's autonomous colleges with independent learning environments. The institution implemented a learner-focused, choice-based credit system in the academic year 2001–2002 at the undergraduate level to accommodate a variety of dynamic and varied options, building on the 23 years of rich experience the college had accumulated under autonomy. To graduate, a student had to complete elective courses given from the second semester to the sixth semester. Following a successful twelve-year CBCS, the undergraduate programmes were then placed under the Integrated Curriculum Model from the academic year 2013-2014. During the academic year 2005–2006, the Choice Based Credit System was introduced at the postgraduate level. Students were allowed to choose their courses freely, taking into account their career goals and skill sets.

Objectives

The study's specific goal was to examine the trends in the choice of elective courses among

the final-year undergraduate and postgraduate students from 2013-2023.

Data Collection

Secondary data from 2013 to 2023 on the choice of elective courses among the postgraduate and undergraduate students was collected from the selected institution. The reason for this categorisation was to analyse whether the students stick to their own discipline in their elective choices or were pulled by other departments. While moving to other departments, there was a mixed choice for the students. Therefore, it was segregated into Languages, Humanities, Sciences and Commerce to know the preference of choice in particular.

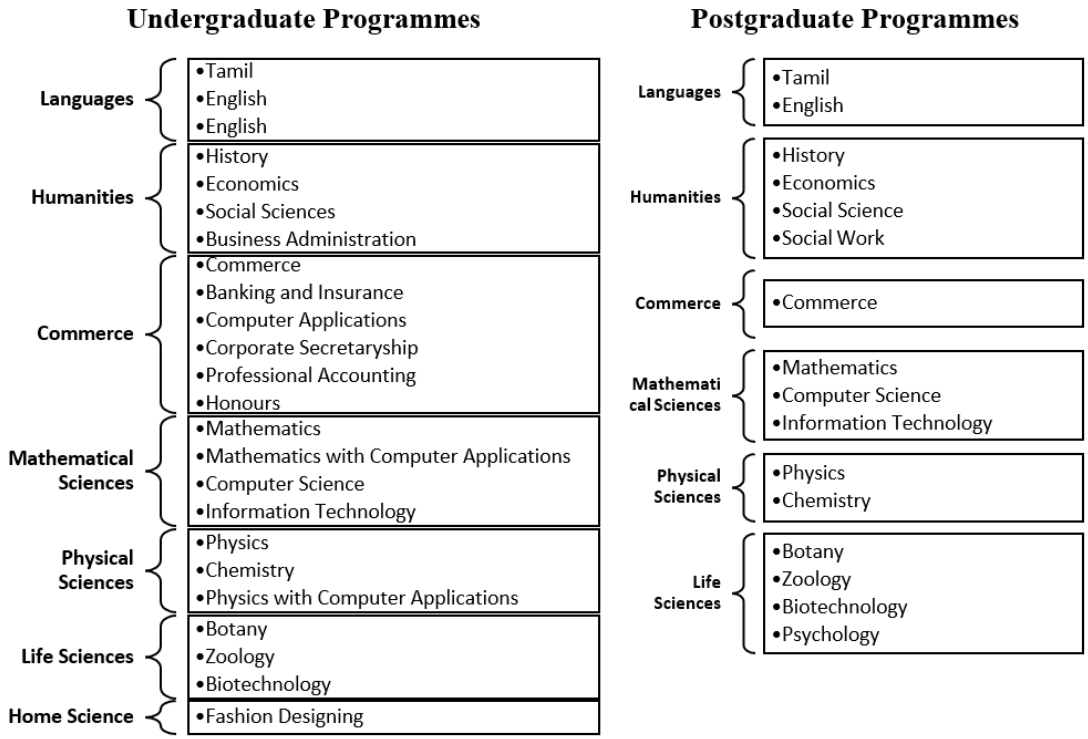

Figure 1. Categorisation of Departments

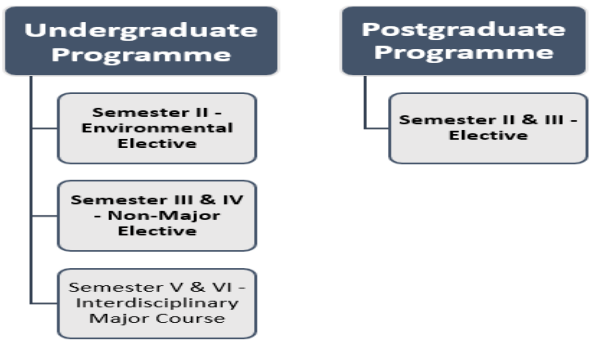

Figure 2. Optional Courses at the Selected College

Note: In undergraduate programme, Semester II and III electives are considered for the study.

Analysis and Interpretation

Since 2013, the college undergraduate curriculum has incorporated the Integrated Curriculum Model. The choice-based curriculum approach was adopted for both the undergraduate (UG) and postgraduate (PG) levels prior to this distinctive structure. Trends in the elective choices made by students were analysed for the years 2013 to 2023.

Postgraduate Student's Trends in the Choice of Elective Courses

Choice Based Credit System has been introduced at the postgraduate level since the academic year 2005-2006. Each department offered one elective course in semesters two and three. As per college norms, for the PG Electives offered in the second semester, the student was required to take any course offered by any department other than their own discipline. In the third semester, a humanities student was required to take courses offered by humanities department and a science student was required to take courses offered by science department. The analysis that follows demonstrates the pattern that evolved across the decade in the student's choice.

The overall trend for the decade 2013–2022 revealed that in the second semester, 51% of the student's choices were for science courses, correlating with the student's strength (Appendix I). Stream-wise analysis highlighted that humanities students (61%) predominantly opted within their streams but not their own majors (norms). Physical sciences students opting for life sciences courses stood at 53%. Commerce students showed an ascendency selection of electives towards science courses (66%). The skewed choice may be attributed to not only the availability but also the interest in new learning and advancements in the scientific field, which serve as strong motivators. In addition, among the language students, 44% of them opted for science courses and 31% opted for humanities courses. In contrast, the science students have revealed a pattern towards language courses. This highlighted that when chances were given, students choices were diverse, they filled their basket with a variety of courses outside their own domains. It was evident that the priority of students of life sciences were life sciences

(19%), mathematical sciences (18 %), and physical sciences (18%). However, mathematical sciences students have expressed a precedence for life sciences (31%) and languages (22%). Overall, the first choice of all the classified groups was life science. The profound interest of students in life science courses, was due to the emerging biotechnologies and human life restoring advancements that foster their demand. 66% of Commerce students opted for science courses. This correlated to the availability of courses on the list. It iterated that availability was the first step towards acceptability and accessibility.

In the third semester, mathematical sciences (57%), humanities (55%) and life sciences (55%) students strongly tend towards their own domains when the opportunity for diversity was given. Whereas the Commerce (46%), languages (44%) and physical sciences (33%) opting within their stream was little less. Eventually, the remaining of them will have made diverse choice in the other eligible streams. But a different trend was observed among the physical sciences students. This showed that they focus beyond their own discipline, understanding the potential and wide scope of career and inter-disciplinary research opportunities. Students with backgrounds in physical sciences, were keen to explore life sciences where they can apply their theoretical principles and unique skills to real-world challenges. For example, human health and the environment, in terms of disease prevention, sustainable agriculture, clean energy and so on. Finally, intellectual curiosity, career aspirations and individual passion played a vital role in switching decisions. Courses like

Entrepreneurial skills in Life Sciences, Micro skills in Counselling of Life Sciences can be cited as a few examples in the option list. However, a different trend was visualised in the third semester. This accorded with the college norms of 'Science to Sciences' and 'Humanities to Humanities.

This overall trend was further disaggregated to recognise patterns and variations within different subsets of the data. Each major-wise trend was analysed (Figure 3). 72% of physical sciences students, 56% of language students, and 52% of life science students opted for courses offered by other majors (Figure 3). Whereas, commerce students (62%), mathematical science students (55%) and humanities students (54%) choose their own major courses.

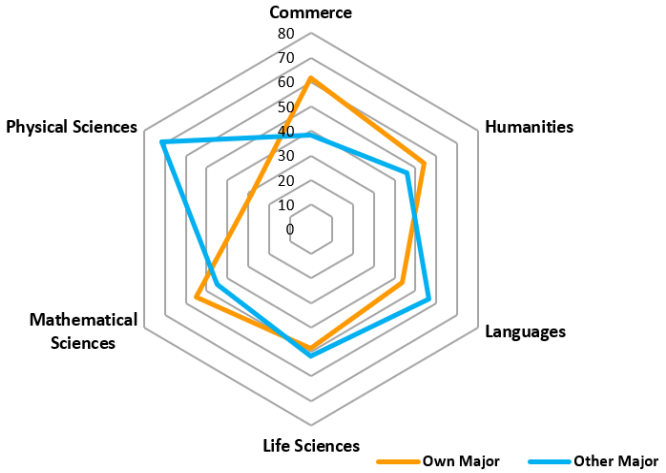

Figure 3: Elective Choice by Postgraduate Students, 2013-2023

Note: Only Semester III choices are included, since in Semester II, the students cannot take their own major as per norms.

Undergraduate Student's Trends in the Choice of Non-Major Elective Courses

Under the Integrated Curriculum model, Non-Major Elective (NME) courses were broad-based, interdisciplinary courses collaboratively structured by any two departments and delivered in semesters III and IV. Each department offered more than one course in collaboration with another department. The high-demand combination of courses (>5%) over the period of time was a blend of 'Humanities & Mathematical Sciences', 'Commerce & Commerce', 'Humanities & Life Sciences', 'Languages &

Physical Sciences' and 'Commerce & Mathematical Sciences' (Appendix II). A warmth emanates from the receiver when the beauty of sciences is integrated with the humanities and languages. The compulsory courses under the 'Common' classification were undergone by one-fifth of the undergraduate students. The proportion was higher among Commerce (24%) and humanities (27%) students.

Accommodating the different needs of the students in terms of harnessing entrepreneurial skills, digital learning, global learning initiatives, environmental consciousness and promoting self-care encourages academic achievement. The innovative diversity of courses with inclusion (open to all / optional or selected as per interest) and accommodating the contemporary skill needs of the students brings the ability to make pivotal changes,

crucial for success in the classroom today (The Hindu 12th June 2023). The stream wise disaggregated analysis (Appendix II) revealed that commerce students opting for commerce-collaborated courses were 36%, for humanities it was 38%, for languages it was 43%, for life sciences it was 35%, for mathematical sciences it was 38% and for physical sciences it was 29%.

Table 1. Top 3 Combinations Preferred by Students, 2013-2023

Students	Preferred Ranks		
	1	2	3
Commerce	C&C	H&MS	MS&C
Home Sciences	MS&C	H&MS	C&C
Humanities	H&H	H&MS	H&LS
Languages	L&LS	L&PS	H&L
Life Sciences	H&LS	L&PS	L&LS
Mathematical Sciences	MS&C	C&C	H&MS
Physical Sciences	L&PS H&LS	H&PS	H&MS, C&C

Source: Computed from Appendix II

Note: Green – indicates preference in other streamsC – Commerce; H – Humanities; L – Languages; LS – Life Sciences; MS – Mathematical Sciences; PS – Physical Sciences

Besides the fact that there was no universally "best" combination, certain combinations were valued as potential and were subject to change over a period of time. Table 1, highlighted the highest combinations in the decade. The top preferred combination was 'Humanities & Mathematical Sciences' (frequency 5), followed by 'Commerce & Commerce' (frequency 4) and the third highest is borne by three combinations - 'Humanities & Life Sciences', 'Languages & Physical Sciences' and 'Mathematical Sciences & Commerce' (frequency 3 each). Among the Commerce students, the first preference had been for 'Commerce & Commerce' courses (14%), followed by 'Humanities & Mathematical Sciences' (9%) and 'Mathematical Sciences & Commerce' courses (8%). Among the humanities students, the precedence had been for 'Humanities & Humanities' courses (10%), 'Humanities & Mathematical Sciences' (9%) 'Humanities & Life Sciences' courses (7%). There has been a high priority among the language students for 'Life Sciences & Languages' courses (13%) and 'Languages & Physical Sciences' courses (12%). Amongst the life science students, the significance was for 'Humanities & Life Sciences' courses (15%) followed by 'Languages & Physical Sciences' (8%). The most preferred course by the mathematical sciences students was 'Mathematical Sciences & Commerce' followed by 'Mathematical Sciences & Languages' and 'Commerce & Commerce' courses (9% each). The most preferred courses of the physical science students are 'Humanities & Life Sciences' and 'Languages & Physical Sciences' courses 9% each. The first choice of home sciences students was a combination of 'Mathematical Sciences & Commerce' courses (12%), while the second choice was 'Humanities & Mathematical Sciences' courses (8%). Wide diversity was observed among the students of the physical sciences.

A true picture of diversity was witnessed in the institution among all streams. It was

proven empirically in Table 1 that humanities with life sciences & mathematical sciences, languages & physical sciences and Commerce within were popular combinations highly opted by students of other streams. It confirmed the success of choice-based credit system on both the dimensions of supply and demand. An academic equilibrium of choice was attained, which has to be dynamic and not static in nature. Planning for elective courses will be easier with a better understanding of demand patterns. The requirement for creating new courses was determined demand driven by student's interest. If a course offered professional opportunities, then it will be engaging, enjoyable and so on. Also, the students may view it as advantageous. The electives, however, as they were selected from a roster of courses at enrolment, require intervention in order to ensure equity and completion.

The study attempted to analyse whether the student's decisions in higher education were rational and dynamic in relation to societal needs. This was measured in terms of diversity in choice of optional courses, where

the long run utility was given due weight. Structural constraints based on college policy played a predominant role in significant differentials over temporal horizons amidst educational choice.

Conclusion

The foresightedness in implementation of CBCS at the college since 2001, before it was made mandatory to all universities (2015), was a strong and honourable feather in the academic cap. The norms framed portray the careful carving of the framework with a wide outlook. The study demonstrated the successful execution of CBCS in the institution. A few of CBCS's distinctive qualities are its capacity to meet students' academic needs and goals and its improved learning possibilities. The intrinsic and extrinsic motivations captured more immediate achievement and also will reflect on the future endeavours of the stakeholders. A mixed strategy enables to build a balanced portfolio of skills. Interdisciplinary synergy increases the competence of the student. Higher educational attainment increases the likelihood of upward mobility and better career prospects. Thus, CBCS experience has not been mere accumulation of credit or clone creation or academic photocopies but assures diverse and unique world-class youth for the nation, which is in alignment with the vision of the college.

References

Al-Taher et al. (2022). The clinical elective course and its effects on medical students and graduates of Jordaniar medical schools. BMC Medical Education, 22:716. doi:10.1186/s12909-022-03779-9

Andersson, T. (2016). Rationality in educational choice. Uppsala Universitet. Retrieved from https://www.diva-portal.org/smash/get/diva2:945136/FULLTEXT01.pdf

Becker, G. (1962). Investment in Human Capital. Journal of Political Economy, 70(5), 9-49. Retrieved from https://www.jstor.org/stable/1829103

Becker, G. (1992). Human Capital and the Economy. Proceedings of the American Philosophical Society, 136, pp. 85-92. Retrieved from https://www.jstor.org/stable/986801

egyankosh. "Unit 5 Education Commissions and Policies since Independence." n.d. 28 June 2023. <https://egyankosh.ac.in/bitstream/123456789/8526/1/Unit%205.pdf>.

Fung, Dilly. A connected Curriculum for Higher Education. University College London, 2017.

Gabay, L. & et al. (2010). Curricular Choice: A Test of a Rational Choice Model of Education. European Sociological Review,

26(4), 447-463. Retrieved from https://doi.org/10.1093/esr/jcp031

Gambetta, D. (1987). Were they pushed or did they jump? Cambridge University Press.

Gandhi, K. (1977). Issues and Choices in Higher Education. Delhi: B.R.Publishing Corporation.

Government of India. "National Education Policy 2020." Ministry of Human Resource Development. 2020.

Hayek, F. A. (1967). Studied in philosophy, politics and economics. University of Chicago press.

Hedges, M. R., Pacheco, G. A., & Webber, D. J. (2013). What determines students' choices of elective modules? University of the West of England: Economics Working Paper Series 1307. Retrieved from http://www1.uwe.ac.uk/bl/bbs/bbsresearch/ economics/economicspapers.aspx

Khanna, R. (2023, June 12). For the modern classroom. The Hindu, p. 16

Moshman, D. (1990). Rationality as a Goal of Education. Educational Psychology Review, 2(4), 335-364. Retrieved from https://digitalcommons. unl.edu/cgi/ viewcontent. cgi?article=1088&context=edpsychpapers

Rapoport, B., & Thibout, C. (2018). Why do boys and girls make different educational choices? The influence of expected earnings and test scores. Economics of Education Review, 62, 205-229. doi:http://dx.doi.org/10.1016/j.econedurev.2017.09.006

Robinson, K. J. (2011). The Rise of Choice in the U.S. University and College:1910-2005. Sociological Forum, 26(3), 601-622. doi:10.1111/j.1573-7861.2011.01264.x

Yildiz, O., & et.al. (2012). Student opinions about elective courses in changing education: The example of Kocaeli University faculty of Education. Journal of Educational Technology Systems, 2(4), 135-142. Retrieved from https://www.researchgate.net/ publication/259632867_Student_opinions_about_elective_courses_in_changing_education_The_example_of_Kocaeli_University_faculty_of_Education