

Impact of Cobra Effect in Education

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Abstract

Education is dynamic in nature, serving to develop individuals in accordance with the ever-changing world. Consequently, governments often introduce new educational policies or decisions to enhance the quality of education. However, the inclusion of such policies or initiatives into the education system can sometimes lead to unintended consequences at both micro and macro levels within the educational ecosystem. Policy makers play a significant role in addressing these educational challenges. However, there are instances where their solutions exacerbate issues at the macro level of education. Conversely, at the micro level, teachers and parents wield substantial influence in resolving educational challenges among children. Therefore, they must exercise caution and remain mindful of the "cobra effect," wherein attempts to solve problems through simplistic and illogical means can inadvertently exacerbate them. Indeed, addressing educational issues is seldom as straightforward as it may initially appear. The cobra effect is not confined to the realm of education; it can manifest across various fields, including social issues, the economy, and administrative decision-making. This study aims to elucidate the concept of the cobra effect within the context of education, delineating its impact and proposing potential remedies to mitigate its effects within the educational sphere.

Keywords: Cobra effect, Education, Policies, Impact, Remedies

Introduction

Education stands as the backbone of any developed or developing nation, emphasizing the imperative need to scrutinize the effectiveness, progressiveness, and real-life applicability of the present education system. Every facet of the education system, including class size, curriculum content, teaching methodologies, institute accreditation policies, and recruitment guidelines, is meticulously crafted by academicians and policymakers. Policies serve as the instruments of governmental change, underscoring the necessity for policymakers to discern the ramifications of educational policies and remain acutely cognizant of the potential impact of the cobra effect. In contemporary times, educational policies often become embroiled in public contestation and substantial controversy, rendering education policy-making an inherently political process (Olssen et al., 2004). Human responses to rules and regulations can often diverge markedly from policymakers' intended outcomes, extending the reach of the cobra effect to ground-level authorities such as teachers, parents, and students. As education policy evolves, teachers emerge as integral stakeholders within the policy community, occupying positions in the hierarchy of power and occasionally intersecting with the policy issues network (Walkinds, 2022). Parents, likewise, represent direct participants in educational endeavours and underscoring the critical importance of prudence in decision-making processes aimed at enhancing their children's education.

Cobra Effect

The concept of the cobra effect, also known as 'perverse incentives,' was coined by German economist Horst Siebert in 2001. Originating from a historical anecdote during British colonial rule in India in the early 1900s, the cobra effect illustrates the unintended consequences of governmental interventions. Faced with a burgeoning cobra population in Delhi, the British government instituted a bounty program, offering rewards for every dead cobra. Initially successful, the initiative soon backfired as enterprising individuals began breeding cobras for profit. Upon realizing the scheme's exploitation, British bureaucrats terminated the bounty program, prompting cobra breeders to release their stock into the city. Consequently, the cobra population ballooned, exacerbating the infestation and exacerbating the initial problem. This phenomenon, where the solution exacerbates the problem, epitomizes the cobra effect, manifesting in various facets of everyday life.

Cobra Effect in Elementary Level Education

Elementary education stands as the cornerstone for accessing further educational opportunities, encompassing the primary and middle stages and catering to the age group of 6-13 years. It serves as the foundational level for shaping the quality of the labor force and human development. Various governmental initiatives have been launched to universalize elementary education, aiming for a 100 percent enrolment rate. However, the leniency in rules and regulations within government schools, particularly concerning admission processes, examinations, and attendance, has led to a decline in public perception regarding the quality and discipline maintained in these institutions.

According to the Unified District Information System for Education (UDISE) report, the percentage of students enrolled in government schools has dwindled from 51.3% in 2017-18 to 49.5% in 2019-20. While flexibility in the education system is essential, an excess of leniency in government schools has resulted in a negative perception among the populace.

The Sarva Shiksha Abhiyan (SSA) program, initiated by the Ministry of Human Resource Development since 2000-2001, aimed to ensure quality education and enhance access and retention of children in schools. The Mid-Day Meal Scheme (MDMS), launched in 1995 as part of SSA, stands as a notable welfare initiative to support its objectives. Despite its success in improving attendance and enrolment rates, the MDMS has encountered challenges, including students' lack of attention in classrooms, prolonged meal times, and occasional instances of students leaving school premises after consuming their meals.

Instances of poor food quality and alleged malpractices have also been reported, raising concerns among parents about their children's health and safety. Consequently, the intended objective of improving children's nutritional status through the MDMS has occasionally been overshadowed by issues such as food quality and hygiene, contributing to a chaotic environment in some schools.

Furthermore, teachers' decisions can also be influenced by the cobra effect. While teachers play a pivotal role in the elementary level, acting as caregivers, mentors, and counsellors, they sometimes overlook the individuality of students and impose standardized rules and benchmarks in the classroom. Strict enforcement of academic requirements, such as completing homework and communicating in the instructional language, can inadvertently contribute to student dropout rates, particularly in rural areas where students face language barriers and inadequate parental support.

Research underscores the significant role of parental involvement in academic achievement, with studies showing that parental engagement positively correlates with student performance. However, misguided

parental decisions, such as increasing tuition burdens, sending children to hostels, or providing excessive digital tools without considering individual needs and interests, can have adverse effects on children's academic well-being.

In conclusion, the cobra effect manifests in various aspects of elementary level education, ranging from government policies and programs to teacher decisions and parental actions. Addressing these unintended consequences requires a nuanced approach that balances flexibility with accountability, and acknowledges the diverse needs and circumstances of students and families.

Cobra Effect in Secondary Education

Secondary education marks the second stage of the formal education system, comprising junior secondary for ages 12 to 16 and senior secondary for ages 16 to 18. At this level, students endeavour to acquire knowledge with a deeper understanding of concepts. However, the prevailing education system often prioritizes grades over genuine comprehension, fostering a culture where high marks hold greater significance than understanding and application. This emphasis on grades has detracted from the true essence of education. An article titled "Marks are not everything," published in The Hindu in May 2015, advocates for a shift towards recognizing and nurturing students' individual strengths and interests, rather than solely focusing on grades, to prevent potential negative repercussions, akin to the cobra effect.

Cobra Effect in Digitalized Education

Quality education, a key agenda of Sustainable Development 2030, necessitates the integration of digital technologies to enhance learning outcomes. However, the widespread adoption of digital tools in contemporary education has presented unforeseen challenges. While digital technologies offer flexibility and accessibility, they also pose risks such as reduced attention spans and social isolation among students. Excessive usage of social media and digital devices during online classes can detract from meaningful interactions with teachers, parents, and peers, ultimately undermining the educational experience and potentially exacerbating the cobra effect.

Cobra Effect in Higher Education

Higher education, encompassing graduation and post-graduation levels, represents the pinnacle of the education journey. Despite India boasting the third-largest higher education system globally, ensuring quality remains a significant challenge. Governmental initiatives such as the National Institutional Ranking Framework (NIRF) and the National Assessment and Accreditation Council (NAAC) aim to assess and improve the quality of higher education institutions. However, the overreliance on documentary evidence and the proliferation of predatory journals have undermined the credibility of accreditation processes. Institutions, driven by the desire to attain higher rankings, resort to unethical practices, such as fabricating data and publishing in low-quality journals, thereby distorting the true quality of higher education. Similarly, the emphasis on publications in faculty recruitment processes has led to the emergence of fraudulent practices, where candidates purchase authorships and exploit loopholes in evaluation criteria.

Ways to Avoid the Cobra Effect

The Cobra Effect, while a cautionary tale, can be mitigated through careful planning and consideration. Here are some strategies to avoid its unintended consequences:

- 1. Follow a Structured Problem-Solving Process:** Utilize structured problem-solving approaches such as PDCA (Plan – Do – Check – Act) to minimize the risk of unintended consequences. This method ensures effective problem-solving while reducing the probability of the Cobra Effect.
- 2. Consider All Possible Outcomes:** Before making decisions or implementing policies, thoroughly consider all potential outcomes. Avoid prioritizing short-term gains and instead evaluate the long-term consequences to anticipate and mitigate unintended effects.
- 3. Study Historical Attempts:** Learn from historical examples to understand the potential pitfalls of certain policies or decisions. Analyze past attempts and strategies to address similar societal issues, drawing insights to inform current decision-making processes.
- 4. Test Before Finalizing:** Conduct testing on a small scale before finalizing policies or decisions. Testing helps identify potential issues and allows for adjustments and corrections before full implementation, reducing the likelihood of unintended consequences.
- 5. Understand Dynamic Systems:** Recognize the complexity of dynamic systems and their inherent unpredictability. Gain a comprehensive understanding of how various factors interact within the education system to minimize unintended outcomes when making decisions.

Conclusion

The Cobra Effect serves as a stark reminder of the consequences of hasty decisions and fixed solutions. From historical examples to modern-day challenges, understanding the intricacies of decision-making is crucial, particularly within the education system. By adopting structured problem-solving processes, considering all possible outcomes, learning from history, testing before finalizing, and understanding dynamic systems, stakeholders can navigate the complexities of education policy with greater foresight and effectiveness. This comprehensive approach is essential for avoiding the pitfalls of the Cobra Effect and fostering positive outcomes in education management and decision-making.

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