

# THE 10s SOLUTION IN DEALING WITH GRADE INFLATION IN HIGHER EDUCATION: DOES IT MAKE SENSE?

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**Abstract:** Globally, grades or marks are used as a fundamental sorting and signaling method for students at all levels of education, from primary schools to universities. Grades given to pupils should be reflective of their progress in learning. Over the past three decades, grade inflation has been endemic in the American educational system, drawing considerable criticism from teachers, scholars, and the general public. Thus, this study aims to examine the Nominal Group Technique (NGT) as a potential alternative approach for addressing the issue of grade inflation. Researchers have employed this methodology to offer resolutions to the issue of grade inflation in higher education. The summary of expert recommendations has identified a total of ten options for addressing grade inflation. Furthermore, the study's results indicate that the NGT technique has proven to be an effective means for swiftly and effortlessly attaining element validation. This success may be attributed to the meticulous development of elements through a comprehensive review of existing literature, followed by rigorous discussions and voting to establish expert consensus. Recommendations for future research are proposed in order to enhance the quality of the study, with a particular focus on collaborating with experts to develop precise guidelines for addressing these issues.

**Keywords:** Grade inflations, Nominal Group Technique, Solutions, Higher educations

## Introduction

In the past two decades, there has been a growing global concern over the phenomenon of grade inflation. Scholars Cote and Allahar (2011) have proposed that this tendency has emerged due to inadequate financial resources during a period of widespread expansion in the higher education sector (Jephcote, Medland, & Lygo-Baker (2021). Grades serve as a means of assessing a student's academic aptitude and competencies, frequently reflecting their readiness for further education and professional pursuits. Considering this statement, several students exert significant effort in order to get the best possible grades, so ensure their eligibility for progression in sequential courses and finally obtaining a high school graduation, as measured by their high school grade point average (HSGPA), which serves as a comprehensive indicator of their knowledge and abilities (Sanchez & Moore, 2022).

There is significant dispute over the precise factors contributing to grade inflation. According to Winzer (2002), several factors contribute to the rise in grades. These factors include institutional modifications, shifts in student demographics (such as the emergence of a student entitlement mindset, an increase in the proportion of female students and adult learners), the transition of students from departments with lower grading standards to those with higher standards, the erosion of the faculty-student relationship, and alterations in the curriculum (Berezvai, Lukáts, & Molontay, 2021).

However, it is widely argued that the increasing significance of student evaluation of teaching (SET) scores is a major factor contributing to the phenomenon of grade inflation (Love and Kotchen, 2010; Jewell, McPherson, and Tieslau, 2013). The assessment of teaching by students gained significance throughout the latter half of the twentieth century as a means of monitoring the effectiveness of instructors. According to Seldin (1998), there was a significant increase in the proportion of colleges in the United States that implemented the practise of collecting student evaluations during a span of 20 years. Specifically, the number rose from 29% in 1973 to 86% in 1993. Currently, a significant majority of higher education institutions use the usage of Student Evaluation of Teaching (SET) scores. These scores play a crucial role in the decision-making processes of universities, particularly in determining tenures, promotions, and various financial incentives.

This study demonstrates that the phenomenon of grade inflation primarily impacts the process of gaining admission to institutions of higher education, specifically at the intermediate (upper secondary) school level. In certain cases, the presence of inflated marks might contribute to the overall success of universities, potentially indicating a positive influence on students' perceived self-efficacy. However, the primary consequence of inflated grades lies in their influence on students' decisions about their choice of university and subject of study. Indirectly, the pursuit of education at a prestigious university and engagement in a higher-paying field of study are associated with increased earnings. The signalling value of school grades seems to have limited implications, mostly in the context of university admissions, as their direct influence on incomes is quite insignificant. Based on this phenomenon, we think that the study of grade inflation is very beneficial and needs to be resolved in detail so that this phenomenon does not disfigure the academic world in particular.

## Literature Review

There is currently significant pressure and scrutiny on higher education systems worldwide, with a heightened focus on matters of accessibility, affordability, educational excellence, and the employability of graduates (Beblavy, Teteryatnikova, and Thum 2015; Clark 2018,

Herrmann 2019). Connected to these concerns is the notion of 'grade inflation': the phenomenon of grades being raised without a commensurate improvement in learning or achievement which can potentially affect the credibility of an institution or sway a student's decision in choosing an educational establishment (Jephcote, Medland, & Lygo-Baker (2021).

While there is a scarcity of empirical information about grade inflation in higher education in the UK, there is a global interest in this phenomenon, as evidenced by studies conducted in Australia, Canada, and Italy (McGinley, 2020). Moreover, extensive research has been conducted on grade inflation in the United States. According to recent data, a significant proportion of students, namely 43%, who were enrolled in 135 4-year colleges and universities in the United States, had the top grades. This represents a notable rise of 28 percentage points since 1960 and 12 percentage points since 1988 (Rojstaczer and Healy, 2015). During a comparable timeframe, the weekly study hours for full-time students witnessed a decline from 40 hours in 1961 to 27 hours in 2003 (Babcock and Marks, 2011). According to the findings of Walberg and Paik (2000), a comprehensive review of 130 research indicated a positive correlation between the amount of time students spent studying and their level of learning. However, it is worth noting that this observation seems to be challenged by data obtained from studies conducted within the United States. Although certain factors such as advancements in technology and improvements in teaching methods may contribute to the observed difference, it is improbable that they can entirely explain such a substantial change.

In the context of Sweden, the primary rationale attributed to the phenomenon of grade inflation is the presence of school competitiveness, as indicated by Vlachos (2010). However, it is worth noting that this phenomenon may also be attributed to the selection of courses made by students (Nordin, Heckley, & Gerdtham, 2019), or the desire of teachers to receive favourable assessments (Redding, 1998). There is a possibility that grade inflation could be associated with factors such as gender or ethnicity. Research examining the comparative effects of blind and nonblind grading reveals inconclusive findings on the presence of gender and ethnic prejudice. There is evidence suggesting that boys experience discrimination in Israel (Lavy, 2008), although no such discrimination is observed in Sweden (Hinnerich, Höglén & Johannesson, 2011). In the context of England, it has been observed that certain ethnic minority groups are subject to underassessment, while others face overassessment (Burgess & Greaves, 2013). Similarly, in India, there is evidence to suggest that individuals belonging to lower castes tend to achieve lower results in examinations compared to those from upper castes (Rema & Linden, 2012). According to the findings of Diamond and Persson (2017) in their study conducted in Sweden, there is no significant correlation between grading leniency and prejudice based on gender or immigration status.

Several research (e.g., Bar, Kadiyali & Zussman, 2009; Bauer & Grave, 2011; Butcher, McEwan & Weerawansa, 2014; Cornelisz, Meeter & Van Klaveren, 2018; Hernandez Rey & Looney, 2016; Wikström & Wikström, 2005) have investigated the prevalence of grade inflation. However, few researchers have looked into how lenient grading practices affect students' long-term academic performance. Dee, Dobbie, Jacob, and Rocko (2016) show that grade retention affects dropout and lower educational attainment for up to four to five years after a grade failure, while grading leniency increases the likelihood of high school graduation. But only Diamond and Persson (2017) and Bagues, Labini, and Zinoviev (2008) 5 assess the effect of grade inflation on income to the best of our knowledge.

### Research Aims:

The objectives of the project were:

- The purpose of this study is to see the views and recommendations of experts in grade inflation solutions.
- Make conclusions and recommendations in dealing with grade inflations on expert recommendations.

### Methodology

The primary methodology employed in this study is the Nominal Group Technique (NGT). The study comprised a group of seven individuals who possessed expertise in the fields of academia and curriculum. Given the present limitations of assembling specialists in person, academics have resorted to conducting Nominal Group Technique (NGT) sessions online through platforms such as Google Meet. A two-hour session was conducted. A panel of experts was convened to conduct a brainstorming session using the Nominal Group Technique (NGT) to generate ideas and provide solutions based on their expert opinions. Upon the conclusion of the session, the researcher employed the NGT approach to perform a precise calculation, so obtaining results that effectively address the objectives outlined in this study.

#### NGT techniques step

The Nominal Group Technique (NGT) is a systematic approach utilised to ascertain a collective consensus among a group of individuals regarding a specific matter. The concept was initially conceptualized as a "participation approach for social planning scenarios" (Delbecq et al., 1975), encompassing exploratory research, citizen engagement, the involvement of interdisciplinary experts, and the evaluation of proposals (Kennedy & Clinton, 2015; Mustapha et al., 2022). Subsequently, this methodology has been employed in diverse group contexts, encompassing empirical investigations within the realm of the social sciences. Although there have been instances of its utilization in educational research (O'Neil and Jackson, 1983; Lomax and McLeman, 1984), the predominant application of this concept seems to lie within the realm of social science research, particularly in the subject of health studies. The aforementioned technique facilitates the process of problem identification, solution research, and priority establishment. It demonstrates efficacy inside "unfamiliar collectives," where maintaining a delicate equilibrium between status and linguistic dominance among group constituents is of paramount significance.

NGT typically consists of four steps:

1. Brainstorming (silent generation of ideas in writing): Participants work silently and independently to jot down their responses to a stimulus question.
2. Round Robin session: When asked, each participant contributes a single idea, which is then recorded on a large flip-chart. It is not permitted to debate the ideas. Sheets that have been completed are taped to the wall so that everyone can see them. The group facilitator continues to summon the participants until all ideas have been recorded or the group determines that they have generated enough ideas.
3. Discussion of the list of ideas: Each idea on the list is discussed by the participants so that everyone understands what it means.
4. Voting: The participants identify the most important ideas, rank-order their preferences (optional), vote on the flipchart, and discuss the voting pattern. It encourages genuine results and commitment to them by requiring anonymous voting in conjunction with the provisions outlined above.

5. Finally, by recording all inputs and approved changes to them on flipchart pages, NGT provides a permanent record of group process and outcomes. When displayed, these sheets allow a group to easily pick up where it left off at a previous meeting, and they also serve as an excellent means of briefing those who miss all or part of a meeting (Fox, 1989).

Within the initial groups, it was seen that certain participants assigned identical points to many ideas. However, it was discovered that this issue could be mitigated by providing a detailed explanation of the ranking procedure, accompanied by ample time for participants to cast their votes. If more guidance was deemed necessary, we offered analogous counsel as suggested by Delbecq et al. (1975). "*Kindly assign a score of 5 to the option that holds the utmost significance to you from the provided selection of your top five choices.*" (Followed by the allotted time for voting) Subsequently, we provided instructions to the participants, stating, "*Out of the four remaining options, kindly assign a value of 1 to the item that holds the least significance for you.*" This was followed by a designated period for voting, and the process was repeated accordingly. One characteristic of a facilitator was observed as they reviewed the ranking sheets as they were submitted (McMillan et al, 2014) .

### Sampling

There is some debate about the most appropriate sample size in conducting studies using NGT techniques. Some scholars state that NGT can be conducted on a single cohort or large group (Lomax & McLeman, 1984; Dobbie et al., 2004; Mustapha et al, 2022) however it can be in divided into small groups so that effective communication can be conducted depending on the needs of the study. For that purpose, the following are the sample sizes that have been used by previous researchers which have been detailed in table 1:

**Table 1: experts sample sizes**

Author	Sample size (expert)
Van de ven & Delbecq (1971)	5-9 experts
Horton (1980)	7-10 Experts
Harvey & Holmes (2012)	6-12 Experts
Abdullah & Islam (2011)	7-10 Experts
Carney et al (1996)	Min 6 Experts

As a result of the above reference, the researcher selected 7 experts to participate in the NGT process of this study. Given the current situation that limits encounters then this amount is considered appropriate for this study.

### Data analysis

The literature on the Nominal Group Technique (NGT) exhibited limited inclusion of discussions pertaining to data management. The data collected in this study was analysed using NGT-PLUS software. The analysed data is described and analyzed in the next section. The summation of scores for each idea was computed, and the ranking of each idea's priority, specifically whether it fell within the top five, was recorded (Table 3). This facilitated prompt dissemination of the findings to the participants.

### Findings

After conducting an extensive review of scholarly literature about the phenomenon of grade inflation, it is our considered opinion that it is imperative for the relevant authorities to



implement remedial measures in order to achieve favorable modifications in the grading system. In such instances, a challenging endeavour would involve persuading the relevant authorities that grade inflation is a problem necessitating remedial measures. To see the solution that can be implemented to prevent this issue of grade inflation from happening, the results of the NGT process with experts are as follows (Raw Data before the draw process):

**Table 2: The NGT raw data**

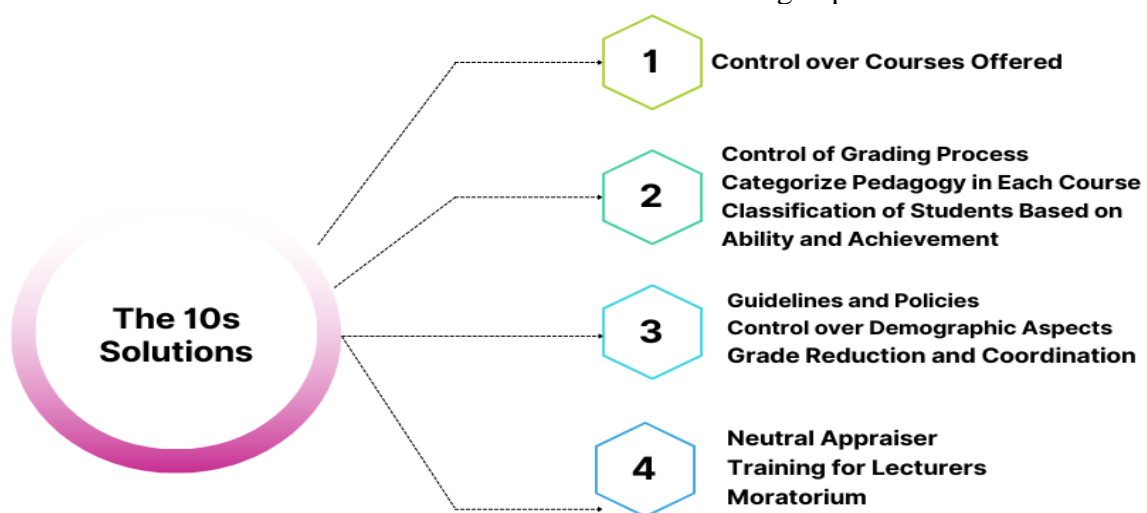
No	Item	Description
1	Control over Demographic Aspects	The variation in demographic factors based on gender among students is expected to influence academic performance in higher education institutions, as each gender exhibits distinct degrees of scholastic achievement. Hence, it is imperative to account for student demographic variables when assessing student accomplishment.
2	Control over Courses Offered	Increased enrollment in other disciplines has more than made up for a reduction in lower-paying fields including social. This calls for a more well-rounded approach to the subjects taught.
3	Control of the Grading Process	The enhancement of academic performance may indicate adaptability within the grading system. It is imperative for educational institutions to have a control mechanism to govern the process of grading student performance.
4	Training for Lecturers	The approach enables educators to gain comprehension of the criteria that necessitate adherence.
5	Categorize Pedagogy in Each Course	The course goals are the same, however the lecturers' teaching styles may change the pedagogy. These instructional variations affect final grades. Stress, comprehension, and testing cause this. Assessing must be done in collaboration with pedagogy.
6	Moratorium	The implementation of a ban on student evaluation has been proposed as a strategy to address the growing issue of grade inflation. This approach effectively mitigates pupils' apprehension and discontentment with their academic performance.
7	Classification of Students Based on Ability and Achievement	The implementation of a classification process becomes necessary in situations when there exists a significant disparity in the abilities of students. Every student is assessed based on their own ability.
8	Guidelines and Policies	It is imperative to establish and effectively communicate precise standards and regulations about credit to members and officials inside the institution. This has the potential to cultivate awareness and enhance understanding of credit policies and methodologies that can be employed by scholars and administrators.
9	Neutral Appraiser	The selection of an independent assessor should not include course professors to mitigate potential biases in the evaluation process. An impartial evaluator will have the capacity to analyze the student's performance against the established criteria for achievement, devoid of any partiality.
10	Grade Reduction and Coordination	Institutions of higher education and their administrations should be cognizant of the necessity for reduction and modification. It is necessary to use grade reduction and adjustment procedures in order to minimize substantial disparities in the acquired grades.

After the brainstorming process was implemented, we found that there were 10 most suitable solutions (refer to Table 2). then we analyse (vote) expert opinions to get approval for the proposed solution using NGT analysis. We use NGT-PLUS software for this analysis. The results of the analysis are as follows:

**Table 3: Result of NGT voting process.**

Items	total items							score	Percentage	Rank	Result
	Voters1	Voters2	Voters3	Voters4	Voters5	Voters6	Voters7				
Control over Demographic Aspects	3	3	2	3	3	3	2	19	90.48	3	Suitable
Control over Courses Offered	3	3	3	3	3	3	3	21	100	1	Suitable
Control of Grading Process	2	3	3	3	3	3	3	20	95.24	2	Suitable
Training for Lecturers	3	3	2	3	2	3	2	18	85.71	4	Suitable
Categorize Pedagogy in Each Course	3	3	3	3	2	3	3	20	95.24	2	Suitable
Moratorium	2	2	3	3	3	3	2	18	85.71	4	Suitable
Classification of Students Based on Ability and Achievement	3	3	2	3	3	3	3	20	95.24	2	Suitable
Guidelines and Policies	3	3	3	2	3	3	2	19	90.48	3	Suitable
Neutral Appraiser	2	2	3	3	2	3	3	18	85.71	4	Suitable
Grade Reduction and Coordination	3	3	2	3	2	3	3	19	90.48	3	Suitable

Table 3 presents the aggregated scores for the solution component of grade inflation solutions, as perceived by the experts. The results of this study provide a concise overview, indicating that the percentages of the tested elements are all within an acceptable range for practical utilization. This is since the percentage value has surpassed the threshold of 70%, as stipulated by previous research investigations (Deslandes, Mendes, Pires & Campos, 2010; Dobbie et al., 2004). The researcher's conclusion is that all study participants concur that the key components inside the produced model are deemed acceptable and viable for use. In comparison to the Delphi approach, the modified NGT technique enables researchers to efficiently acquire information, as it eliminates the need for iterative evaluation sessions among experts.



**Figure 1: The 10s Solution for grade inflations**

## Discussion & Conclusion

Most academic institutions that engage in grade inflation subscribe to the concept of "student consumerism," which posits that students desire value for their financial investment and hence seek to attain high scores with minimal effort. Furthermore, academic institutions possess an inherent responsibility to artificially boost marks in order to enhance the prospects of underperforming students in securing improved employment chances. Nevertheless, it is crucial for these educational establishments to comprehend that, over time, the reputation of the school and the competencies of its students hold greater significance than individual grades. However, there is a prevailing belief among many individuals that grade inflation is an inevitable occurrence, as it is perceived to be a low-cost practice to bestow favorable grades upon students. This research examines the adverse effects of grade inflation to establish that it is not without repercussions. Specifically, it explores the negative implications for graduates, potential employers, the reputation of academic institutions, and the overall societal well-being.

In summary, following an extensive review of scholarly literature pertaining to the phenomenon of grade inflation, it is our contention that proactive measures need to be undertaken to address this matter effectively. Academic institutions should initiate a discourse on grade inflation by initially identifying its significance as a substantial issue that can potentially result in diverse adverse outcomes over an extended period. This report presents ten fundamental reform proposals that academic institutions might use to address the issue of grade inflation. This study aims to generate increased awareness surrounding the issue of grade inflation and foster additional dialogue in order to develop novel solutions for addressing grade inflation. We also hope that this study will provide some guidance and initiative for the concerned parties to look at this issue in a more in-depth and organized way so that the quality of education can be well maintained and with integrity.

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