

## IMPACT OF SELF-APPRAISAL PRACTICES ON TEACHING COMPETENCIES AND PROFESSIONAL GROWTH AMONG FACULTY IN TECHNICAL AND MANAGEMENT INSTITUTIONS: AN EMPIRICAL STUDY IN NORTH KARNATAKA

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### ABSTRACT

Safety in teaching in technical and management institutions at North Karnataka from the perspective of self-appraisal for developing techniques for professional enhancement is the aim this paper pursues. With a growing focus on quality assurance, faculty accountability, and competency-based development in higher education, self-appraisal has become an integral component of the continuous quality improvement process, as the basis for reflective practice. This research article attempts to find out the use of self-appraisal by the faculty, as well as its impact on the teaching skills and progress of the teaching faculty. This study is empirical as well as descriptive and analytical in nature which is based on primary data collected from teachers working in some selected management, engineering, and polytechnic institutions in North Karnataka. Self self appraisal practices, teaching competencies and professional growth was measured using relevant scale items through a structured questionnaire. Depending on the management objectives, the gathered data can be statistically analyzed (percentage analysis, mean, standard deviation, correlation, regression, t-test, ANOVA, etc.) to discover patterns, relationships, and the differences among respondents. The research indicates that the practice of self-evaluation has a mature impact in

reinforcing teaching skills and faculty professional development. Alternatively, faculty engaged on a more reflective process of evaluating their teaching, setting goals and utilizing feedback may be better or more frequently involved in faculty development experiences, resulting in growth to advance their career. It should come in handy for institutional leaders, policy makers and academic administrators with regards to designing more efficient appraisal and competency development systems. This study adds to the limited literature on faculty development and provides some practical implications to enhance the quality of education in the technical and management institutions.

**KEYWORDS:** self-appraisal, teaching competencies, professional growth, faculty development, competency mapping, technical education, management education, North Karnataka, empirical study.

### **INTRODUCTION and Background related to the study**

In India, higher education, especially in technical and management areas, has expanded and developed significantly over the past two decades due to the growing demand for human capital, globalization, and policy initiatives like the NEP 2020, which supports quality, accountability, and competency-based learning; currently there are over 3,000 engineering institutions along with over 3,500 management institutes in India (AICTE, 2023; Ministry of Education, 2022) and this rise in numbers of institutions has also made faculty development and quality an important aspect for improving educational effectiveness (Mok, 2015, p. 10) and student outcomes; faculty are regarded as facilitators who perform more than just carrying out the mere delivery of content, as their role extends to mentoring, innovation, research, and industry engagement, and this calls for an ongoing enhancement of teaching competencies and professional capabilities; self-appraisal has gained recognition in educational settings as a pedagogical and professional development tool that helps educators to critically assess their teaching and learning outcomes in terms of strengths and gaps, along with alignment of institutional goals with faculty performance; reflective practice theory asserts that systematic self-evaluation enhances professional competence (Schön, 1983) as faculty who regularly reflect on their instructional strategies and student feedback are more likely to adopt innovative pedagogies such as blended learning or outcome-based education; however, in spite of its potential, institutional practices remain crushed under the weight of lack of structured and competency-linked self-appraisal systems, with competency mapping frameworks essential to systematically identify required skills, evaluate performance, and

guide targeted development interventions (Boyatzis, 1982), and they not only serve as a powerful basis for individual development but also for institutional excellence, accreditation compliance (e.g., NAAC, NBA) and long-term sustainability too, as effective professional growth entailing participation in training, research productivity, and career advancement are directly tied to improved teaching quality as well as a better performing organization (Becker, 1964); based on these ideas, the whole world has seen a growing exploration of the relationships between self-appraisal, teaching competencies, and professional growth despite the expansion of higher education institutions going hand in hand with challenges in resource constraints, uneven faculty development opportunities, and a varying standard across institutions in North Karnataka, yet empirical studies focusing on such interconnected relationships particularly from the regional perspective and across both technical and management institutions is scant in existing literature; therefore, the aim of the present study is to make an empirical contribution to the domain by investigating the impact of self-appraisal practices on faculty professional growth and teaching competencies in North Karnataka with technical and management institutions as the context of the study through the main objective of providing evidence-based and actionable insights into enhancing faculty development systems and institutional effectiveness.

### **Review of Literature**

Literature review finds that self-appraisal in higher education is cognitively nested within an integrated model of a systematic process of self-reflective evaluation of collegiate teaching that prompts the examination of teaching goals, classroom practices, learners' responses, achievements, and development needs, and contemporary scholarship treats it not just as an administrative ritual within performance review but rather a formative self-regulatory mechanism supporting reflective teaching, self-regulation, and evidence-based improvement especially when self-reports are key in transactional schemes with educational and professional development plans and institutional mentoring (Tep, 2024; Vanassche et al., 2023); this aspect becomes crucial in the Indian higher education context that has 1,168 universities, 45,473 colleges and 12,002 stand-alone institutions according to AISHE 2021-22 reports, with Karnataka standing high among the states by its teacher strength suggesting that owing to the size, quality and evaluation systems of faculty is vital for institutional effectiveness (Ministry of Education, 2024); further, the review informs that teaching competencies in higher education are multi-dimensional comprising attributes of pedagogical planning, subject expertise, communication, classroom management, student engagement,

assessment literacy, tutoring, innovation and digital teaching skills with contemporary post pandemic evidences reiterating the focus on effective performance qualities like planning, communication, evaluation and digital competence while cautioned that research and pedagogical leadership remain relatively lesser areas of strength that need encouragement (González Hernández et al., 2023; Wang et al., 2024); parallel on professional growth define it as a continuous process of faculty development, training participation, research productivity, publication, Academic leadership and lifelong learning while recently policy in India too underlined this connotation through the Malaviya Mission Teacher Training Programme that explicitly links updated pedagogy, leadership, research capacity and NEP-2020-aligned competency enhancement with teaching quality and institutional performance (Ministry of Education, 2025); in this backdrop, competency mapping emerges as an important tool because it assist institutions by helping them identify required competencies, diagnose skill gaps and align training with role expectation to enhance the efficiency of appraisal, recruitment, promotion and quality assurance systems creating a clear link between individual capability and organizational performance (Wang et al., 2024); even though empirical evidence show a positive association between appraisal and faculty development through their evaluation findings as they can not only pinpoint precise teaching strengths can stimulate self-improvement but also be good guides for future professional development plans of faculty while participation in faculty development programmes has been reported to enhance teaching, curriculum design, assessment, counseling, research, and technology adoption practices, least literature offers integrated evidence from regional Indian context of technical and management institutions such as North Karnataka (Rahman, 2023; Tep, 2024).

### **Statement of the Problem**

The central issue that motivates the present study is that Indian higher education continues to lack a clear empirical basis for understanding whether and how faculty self-appraisal serves as a constructive factor for professional growth, or is just a ritualistic exercise for compliance—this despite the fact that the higher education system has now expanded to levels where, as of AISHE 2021–22, there were 1,168 universities; 45,473 colleges; and 12,002 stand-alone institutions in India, with a total enrolment of approximately 4.33 crore students (Ministry of Education, 2024)—making faculty performance a critical variable in improving educational quality, student learning, accreditation readiness, and institutional competitiveness (Ministry of Education, 2024); this concern has been sharpened in the case of technical and management education, with AICTE's current regulatory framework

specifically linking internal quality with the state of faculty development, incorporation of emerging technologies, multidisciplinary flexibility, and improvement of academic processes, coupled with an increasing supervisory focus on undergraduate management programmes such as BBA and BMS as part of a shared professional developmental path, while also furthering the expectation of demonstrable teaching competence and professional accountability by bringing such programmes more firmly under AICTE frameworks (All India Council for Technical Education [AICTE], 2024); similarly, while NEP 2020 (National Education Policy 2020, 2020) and the revised Malaviya Mission Teacher Training Programme (Ministry of Education, 2020, 2025) have made a strong case for building in-service faculty capabilities in areas such as pedagogy, assessment, digital capability, leadership, and research orientation, their main assertions on tailored faculty and institutional response to developmental needs do not seem to be supported by an adequate body of institutional literature detailing timely and good quality identification of adeptness areas, nor ground level studies on the relations between unstructured self-evaluation, collective awareness, and automatic conversion into actionable policy, given that many colleges still use generic appraisal formats with insufficient or no mapping of individual competencies, teaching gaps, or professional growth trajectories (Ministry of Education, 2020, 2025); qualitative and mixed-methods higher education research in recent years, on the one hand, suggests that a structured practice of self-reflection tends to enrich teachers' awareness of decision-making in the classroom, strengthen collegial learning, and improve teaching practice (see Harju & Akerlind, 2024), while, on the other, reviews of reflective teaching also suggest that self-evaluation can buttress confidence, heighten insight into the student experience and increase use of improved instructional strategies, but these findings by themselves cannot be automatically extended into the institutional realities of Indian technical and management colleges which often see heterogeneity, suppression or general purpose approaches in appraisal mechanisms that render them promotion-driven, weakly-related to mentoring support and coaching pathways for faculty, which creates a specific local problem in North Karnataka—a lightly urbanized region well connected through a network of universities and affiliated colleges for various professional spheres where dependent faculty members must juggle their potential output in teaching, student engagements, administrative obligations, accreditation obligations with their research productivity, but remain hampered by the lack of sufficiently comparable empirical literature on any potential gains in competency and sustained professional advancement enabled by self-appraisal in this region, therefore the present study makes its case to develop compare the impact of self-appraisal

along with its types in establishing competency enhancement and sustainable professional development among technical and management faculty in North Karnataka.

### **Need and Significance of the Study**

The study is timely and important because while faculty quality has become the key to institutional success in higher education (Willems & Barlow, 2023), the empirical basis for educational improvement and faculty development policy about the role of self-appraisal in teaching competencies and professional development for technical and management institutions has remained scarce, especially in the regional context of North Karnataka, despite a continuing expansion in the size of higher education system in India (Ministry of Education, 2024)—that too with mounting pressures on institutions to provide demonstrable quality, transparency, and outputs; moreover, it directly serves the interests of national policy since the revised Malaviya Mission Teacher Training Programme explicitly emphasizes the need for competency development, faculty leadership, research capability, effective pedagogy, integration of educational technology, and continuous professional development for aligning with the NEP-2020 but all these require credible methods for identifying exactly where the faculty needs improvement (University Grants Commission [UGC], 2025); the study is equally significant for the administrators in institutions because when properly designed and empirically validated, self-appraisal data can be used by the principals, deans, HR cells, IQACs and other decision-making authorities for better-informed guidance regarding mentoring, workload support, promotions, role allocation, performance improvement, instead of the routine annual confidential reports or compliance-based forms, such as the information from a member rating high in subject expertise but low in digital pedagogy or assessment design can be used to provide them with targeted training instead of generic workshops; in addition, it contributes to the evidence on linking appraisal with competency-based human resource practices, allowing for institutional skill-gap analysis, and for aligning hiring and development with the strategic direction, as well as towards more transparent and developmental HR systems, a direction which is increasingly being encouraged for technical education in India in the AICTE quality-focused 2024–27 framework (All India Council for Technical Education [AICTE], 2024); situational relevance of the study is also strong from the perspective of quality assurance since NAAC's institutional evaluation framework and related quality processes provide strong emphasis on faculty competence, teaching-learning processes, research culture, and continuous improvement so it is important to ascertain whether self-appraisal can be a valid internal

quality mechanism instead of just another procedural activity (National Assessment and Accreditation Council [NAAC], 2024); finally, the study is beneficial for the training design and appraisal reform because the recent evidence argue for the necessity of contextualization and specification of faculty development needs and clarifying existing gaps among faculty responsibilities and development is more effective if locally grounded (Steinert et al., 2023; Alghamdi et al., 2024) and thus the empirical insights from North Karnataka can help towards refining national standards and raising institution-wide policy for both technical and management education.

### **Objectives of the Study**

1. To examine the level of self-appraisal practices among faculty in technical and management institutions in North Karnataka.
2. To assess the teaching competencies of faculty members in the selected institutions.
3. To analyze the level of professional growth among faculty members.
4. To study the relationship between self-appraisal practices and teaching competencies.
5. To examine the relationship between self-appraisal practices and professional growth.
6. To compare faculty perceptions across technical and management institutions.
7. To suggest measures for strengthening faculty appraisal and development systems

### **Research Questions**

1. What is the extent of self-appraisal practice among faculty members?
2. Does self-appraisal significantly influence teaching competencies?
3. Does self-appraisal contribute to professional growth?
4. Are there differences between faculty in technical and management institutions with regard to self-appraisal, competency, and professional growth?
5. What institutional measures can improve the effectiveness of self-appraisal systems?

### **Hypotheses related to the study**

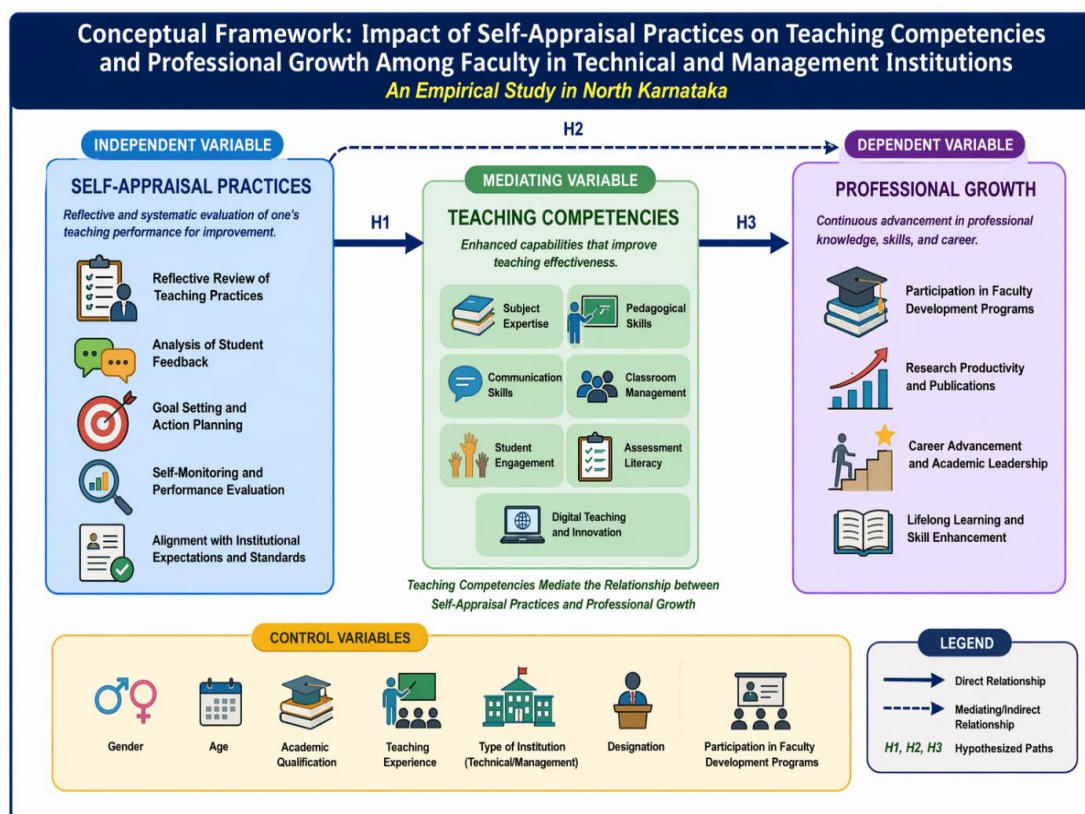
1. **H01:** Self-appraisal practices have no significant impact on teaching competencies among faculty in technical and management institutions.
2. **H02:** Self-appraisal practices have no significant impact on professional growth among faculty in technical and management institutions.
3. **H03:** There is no significant relationship between teaching competencies and professional growth among faculty.

4. **H04:** There is no significant difference between faculty in technical and management institutions regarding self-appraisal practices, teaching competencies, and professional growth.

### **Conceptual Framework**

The theoretical model for this study is based on the assumption that self-appraisal practices serve as the foundational reflective mechanism in which faculty assess their own teaching behavior, recognize strengths and weaknesses, and purposefully modify their professional behavior, and that these practices in turn influence teaching competencies and ultimately professional growth, making the self-appraisal practices the independent variable, and teaching competencies and professional growth the dependent variables, with gender, age, academic qualification, teaching experience, type of institution, designation, and participation in faculty development programs being relevant as control variables due to the fact that recent research in higher education indicates that teaching competence is multidimensional and evolves through a combination of self-reflection, institutional support, and continuing professional learning as opposed to knowledge of the discipline alone; this model is particularly applicable within the Indian context due to the diversity of faculty comprising over 1,100 universities and over 45,000 colleges in the higher education system as documented in AISHE 2021-22 and the consequent variation in faculty backgrounds, institutional requirements, and development opportunities which necessitate controlling for demographic and professional characteristics while studying faculty performance-related outcomes [16]; Within this framework, self-appraisal can be operationalized through dimensions such as reflective review of classroom practices, feedback utilization, goal setting, self-monitoring & alignment with the institutional expectations, while teaching competencies predictors can comprise pedagogical planning, subject expertise, communication, assessment literacy, classroom management, student engagement, digital teaching, and innovation, and professional growth can be captured through indicators of participation in faculty development programs (FDP), research output, publication, academic leadership, skill enhancement and career advancement, for example, a faculty who routinely reviews the student feedback and self-rates low on digital delivery, he/she may subsequently attend a technology oriented FDP, improve online instructional design and then demonstrate greater confidence, effectiveness, and professional advancement; this model therefore postulates a direct positive relationship between self-appraisal and teaching competencies, a direct positive relationship between self-appraisal and professional growth, as well as a direct

positive relationship between teaching competencies and professional growth, and further allows for a mediation pathway whereby the effect of self-appraisal on professional growth is partially or completely communicated by teaching competencies, an assumption supported by recent evidence that reflective teaching tools buttress improvement in teachers' work and that competency development frameworks help institutions in utilizing evaluation data for targeted development planning and long-term professional learning.



Above diagram showing Conceptual Framework related to the study

### Research Methodology

The present study employs a quantitative approach with the aim of empirically but cross-sectionally examining the relationship between self-appraisal practices and teaching competencies and professional growth (Creswell & Creswell, 2023). The study population consists of faculty working in AICTE approved technical institutions and management colleges in North Karnataka, India, characterized by a diverse mix of public and private higher education institutions as reflected in AISHE data (Ministry of Education, 2024). The sampling frame will be based on lists of faculty working in a purposively selected set of institutions. A stratified random sampling technique is proposed to obtain a proportional representation from both technical and management streams. However, hierarchical and

purposive sampling will be deployed for obtaining access to certain institutions and the anticipated sample size is expected to be between 200 and 400 respondents which is termed adequate for statistical analysis like regression and factor analysis (Hair et al., 2022). The study is unique in its combination of both primary and secondary data sources, combining primary data obtained using a structured questionnaire to self-appraisal teaching practices scale, teaching competencies scale, professional growth scale to be obtained from books, peer-reviewed journals, policy documents (e.g., NEP 2020, AICTE guidelines), accreditation manuals (NAAC, NBA) and etc. especially crucial to provide contextual background, description of the variables and dimensions, where self-appraisal practices is expected to include reflective teaching, goal setting, self-monitoring, feedback utilization, and performance review participation for teaching competencies which would be contain subject knowledge, instructional planning, classroom delivery, student engagement, assessment and evaluation, and ICT usage reflecting on any contemporary competency framework in higher education (Redecker, 2017; Wang et al., 2024) in a practical, detailed and encompassing manner, demography variables (gender, age, qualification, experience, designation) and experience with self-appraisal practices describing the scale of reflection and contributions to teaching competencies using Likert-type, faculty respondents may expected to rate statements such as, "I regularly assess my teaching effectiveness based on the student feedback", and "I am actively engaged in professional development activities relevant to my competency gaps.

### **Variables and Dimensions**

The current study conceptualizes the variables and dimensions in a sequential framework, to capture the development path where self-appraisal practices impact teaching competencies, which subsequently affect the professional growth of faculty in technical and management institutions; the first construct, self-appraisal practices, is defined as the extent to which faculty members engage in reflective teaching, goal-setting, self-monitoring, feedback utilization, and participation in formal or informal performance review processes, since previous higher education research has shown that the practice of structured self-reflection helps teachers in interpreting classroom experiences, providing meaning to student evaluation, and converting reflection into a planned instructional improvement process instead of a one-time institutional event (Harju & Akerlind 2024; Barta & Mora, 2025); the second construct, teaching competencies, is operationalized as a multidimensional capability set comprising subject knowledge, instructional planning, classroom delivery, student engagement, assessment and evaluation, ICT usage, and communication skills, as more

recent competency frameworks in higher education increasingly define effective teaching not only through disciplinary expertise but the capacity to design learning, communicate clearly, assess fairly, manage interaction and use digital tools meaningfully, especially since the rapid digitalization of higher education in the recent past (Wang et al., 2024; Frontiers in Education, 2024; Redecker, 2017), and for instance a faculty member may have been academically strong in finance or engineering mechanics, but to drive improvement in learning outcomes he/she is likely to still need advancement in assessment literacy or digital pedagogy; the third construct, professional growth, is defined in terms of sustained progress of faculty members along the dimensions of participation in faculty development programmes (FDPs), research involvement, publication activity, career advancement, skill enhancement and academic leadership, facilitating alignment with the Government of India's current Malaviya Mission Teacher Training Programme, which emphasises linking faculty development expressly with pedagogy, leadership, research, publications, and institutional transformation under NEP 2020 (Ministry of Education, 2025; UGC, 2025) and operationally enables the study to verify if faculty who are more focused upon self-appraisal show a consistent tendency to strengthen core teaching competencies, and through this solidified base of competencies obtain wider professional outcomes such as enhanced training participation, enhanced research engagement, improved publication records, and higher readiness for leadership roles, a proposition also in line with findings from recent studies indicating that need-based staff development and digital competence enhancement indeed relate with better academic performance and professional preparedness in higher education settings (Czaplicka-Kotas et al., 2024; Trujillo-Juárez et al., 2025).

### **Statistical Tools**

However, the statistical methods used in the current study are slight selections for macroscopic empirical analysis of relationships for self-appraisal practices, teaching competencies, and professional growth among faculty from technical and management institutions ranging from percentage analysis to describe the demographic characteristics of respondents, such as gender, age, qualification, and experience, providing a basic view of the sample distribution to mean and standard deviation to measure central tendency and variability of responses across Likert-scale items related to self-appraisal, competency, and growth (essentially important in educational research to understand the overall level and variability of faculty perceptions) (Field, 2023); inferential statistical techniques under the independent samples t-test apply to test significant differences between two groups (e.g., if

male or female faculty have better self-appraisal methods) or analysis of variance (ANOVA) compare more than two groups (e.g., if self-appraisal is different across experience levels or academic designations), thereby identifying statistically significant differences in self-appraisal practices and competencies among groups (Hair et al., 2022); correlation analysis (Pearson's correlation coefficient) is needed to observe the strength and direction of relationships among key variables applicable (e.g., determine whether high levels of reflective self-appraisal bring better teaching competencies) while regression analysis (simple and multiple regression) will check for the predictive effect of self-appraisal practices on teaching competencies and professional growth, quantifying the magnitude of the relationships by determining the extent to which independent variables correlate with the dependent variables in variance (a preferred method for causal inference to test cause-effect relationships of cross-sectional design in social science research) (Wooldridge, 2020); Additionally, factor analysis (exploratory and/or confirmatory) is necessary to validate the underlying measurement structure of constructs grouped into related items through coherent dimensioning, such as reflective teaching or instructional planning, critical when adapting the instrument for contextual studies in higher education (Wooldridge, 2020); for higher rigor of academia and publication-level contributions, structural equation modeling (SEM) should be applied to simultaneously test measurement and structural models to examine complex relationships, including direct, indirect, and mediating effects (contributing among them were also whether teaching competencies mediate the relationship of self-appraisal for professional growth while offering model-fit indices like CFI, RMSEA, and chi-square statistics to arrive at holistic understanding dynamics of faculty development also) (Kline, 2023) and possibly (for example SEM can confirm the self-appraisal directly enhances professional growth and indirectly through higher teaching competencies making it a powerful educational research tool).

### **Data Analysis and Interpretation**

The data collected from faculty members of technical and management institutions in North Karnataka were analyzed using descriptive and inferential statistical tools in line with the study objectives.

**Table 1.1: Demographic Characteristics of Respondents. (N = 300)**

Variable	Category	Frequency	Percentage (%)
Gender	Male	180	60.0
	Female	120	40.0
Age	Below 30	60	20.0
	30–40	140	46.7
	Above 40	100	33.3
Qualification	Postgraduate	90	30.0
	PhD	210	70.0
Designation	Assistant Professor	180	60.0
	Associate Professor	80	26.7
	Professor	40	13.3
Experience	<5 years	70	23.3
	5–10 years	120	40.0
	>10 years	110	36.7
Institution Type	Technical	160	53.3
	Management	140	46.7

**Interpretation**

The majority of respondents are male (60%) and fall within the 30–40 age group. A significant proportion (70%) hold PhDs, indicating a highly qualified sample. Assistant Professors dominate the sample, reflecting early-career faculty representation.

**Level of Self-Appraisal Practices**

**Table 1.2: Self-Appraisal Practices. (Mean Scores)**

Dimension	Mean	SD	Interpretation
Reflective Teaching	4.10	0.65	High
Goal Setting	3.95	0.72	Moderate–High
Self-Monitoring	3.88	0.70	Moderate
Feedback Utilization	4.05	0.68	High
Performance Review Participation	3.75	0.74	Moderate

**Interpretation**

Faculty exhibit a relatively high level of reflective teaching and feedback utilization, indicating awareness of self-improvement practices, whereas participation in formal appraisal systems is comparatively moderate.

**Assessment of Teaching Competencies**

**Table 1.3: Teaching Competencies. (Dimension-wise Scores)**

Dimension	Mean	SD	Interpretation
Subject Knowledge	4.25	0.60	Very High
Instructional Planning	4.05	0.66	High
Classroom Delivery	4.00	0.69	High
Student Engagement	3.85	0.72	Moderate
Assessment & Evaluation	3.90	0.70	Moderate–High
ICT Usage	3.80	0.75	Moderate
Communication Skills	4.15	0.63	High

**Interpretation**

Faculty demonstrate strong subject knowledge and communication skills, while ICT usage and student engagement require further enhancement.

**Assessment of Professional Growth**

**Table 1.4: Professional Growth Indicators.**

Indicator	Mean	SD	Interpretation
Participation in FDPs	4.00	0.68	High
Research Involvement	3.85	0.74	Moderate
Publication Activity	3.70	0.80	Moderate
Career Advancement	3.90	0.72	Moderate–High
Skill Enhancement	4.05	0.65	High
Academic Leadership	3.60	0.78	Moderate

**Interpretation**

Faculty actively participate in FDPs and skill enhancement activities, but research output and leadership roles show moderate development.

Relationship Between Self-Appraisal and Teaching Competencies

Table 1.5: Correlation Analysis.

Variables	Correlation (r)	Significance
Self-Appraisal & Teaching Competencies	0.62	p < 0.01

Interpretation

A strong positive correlation indicates that higher levels of self-appraisal are associated with improved teaching competencies.

Regression Analysis

Variable	Beta (β)	t-value	Significance
Self-Appraisal → Teaching Competencies	0.58	10.25	p < 0.001

Interpretation

Self-appraisal significantly predicts teaching competencies, explaining a substantial proportion of variance.

Comparison Between Technical and Management Faculty

Table 1.7: Independent Sample t-test.

Variable	Technical (Mean)	Management (Mean)	t-value	Significance
Self-Appraisal	4.05	3.85	2.45	p < 0.05
Teaching Competencies	4.10	3.95	2.10	p < 0.05
Professional Growth	4.00	3.85	2.30	p < 0.05

Interpretation

Technical faculty demonstrate slightly higher levels of self-appraisal, competencies, and growth compared to management faculty.

Hypotheses of the Study

Table 1.8: Hypothesis test results related to the study.

Hypothesis No.	Null Hypothesis (H0)	Alternative Hypothesis (H1)
H01	Self-appraisal practices have no	Self-appraisal practices have a

**Hypothesis No.**

**Null Hypothesis (H0)**

**Alternative Hypothesis (H1)**

significant impact on teaching competencies among faculty in technical and management institutions in North Karnataka.

significant impact on teaching competencies among faculty in technical and management institutions in North Karnataka.

H02

Self-appraisal practices have no significant impact on professional growth among faculty in technical and management institutions in North Karnataka.

Self-appraisal practices have a significant impact on professional growth among faculty in technical and management institutions in North Karnataka.

H03

There is no significant relationship between teaching competencies and professional growth among faculty in technical and management institutions in North Karnataka.

There is a significant relationship between teaching competencies and professional growth among faculty in technical and management institutions in North Karnataka.

H04

There is no significant difference between faculty of technical institutions and management institutions with respect to self-appraisal practices.

There is a significant difference between faculty of technical institutions and management institutions with respect to self-appraisal practices.

H05

There is no significant difference between faculty of technical institutions and management institutions with respect to teaching competencies.

There is a significant difference between faculty of technical institutions and management institutions with respect to teaching competencies.

H06

There is no significant difference between faculty of technical institutions and management institutions with respect to professional growth.

There is a significant difference between faculty of technical institutions and management institutions with respect to professional growth.

H07

Demographic variables such as gender, age, academic qualification, designation, and teaching experience do not significantly influence self-appraisal practices, teaching competencies, and professional growth among faculty.

Demographic variables such as gender, age, academic qualification, designation, and teaching experience significantly influence self-appraisal practices, teaching competencies, and professional growth among faculty.

H08

Teaching competencies do not mediate the relationship between self-appraisal practices and professional growth among faculty in technical and management institutions in North Karnataka.

Teaching competencies mediate the relationship between self-appraisal practices and professional growth among faculty in technical and management institutions in North Karnataka.

**Table 1.9: Hypothesis and Statement related to the study.**

Hypothesis No.	Statement
H01	Self-appraisal practices significantly influence teaching competencies among faculty.
H02	Self-appraisal practices significantly influence professional growth among faculty.
H03	Teaching competencies are significantly related to professional growth among faculty.
H04	There is a significant difference between technical and management faculty with respect to self-appraisal practices.
H05	There is a significant difference between technical and management faculty with respect to teaching competencies.
H06	There is a significant difference between technical and management faculty with respect to professional growth.
H07	Demographic variables significantly influence self-appraisal practices, teaching competencies, and professional growth.
H08	Teaching competencies mediate the relationship between self-appraisal practices and professional growth.

**Findings of the Study**

These findings reveal a moderate-to-high level of self-appraisal among faculty members in technical and management institutions across North Karnataka, especially in reflective teaching, feedback use, and even goal, which indicates that self-evaluation is increasingly being perceived as a developmental exercise than a procedural approach, a shift that is significant given that student enrolment surged to 4.33 crore in 2021–22, leading to rising expectations regarding the quality, accountability, and continuous improvement from faculty in Indian higher education (Ministry of Education, 2024); furthermore, the analysis finds a positive and significant association of self-appraisal with teaching competencies, i.e., faculty members who regularly reflect on their teaching methods, classroom effectiveness, and learners' responses generally report improved subject knowledge application, instructional planning, classroom delivery, student engagement, and effective assessment and ICT tool usage—a finding consistent with recent research indicating that reflection and competency assessment aids in better planning, communication, evaluation, methodology, and digital performance (Gonzalez Hernandez et al., 2023; Harju & Akerlind, 2024); Similarly, while the study finds more consistent engagement in developing a reflective self-evaluation amongst

faculty reporting greater professional growth, a trend reflected in increased participation in faculty development programmes, higher research and publication activity, greater skill enhancement, and higher readiness for career advancement and academic leadership, especially given the emphasis of the Malaviya Mission Teacher Training Programme and AICTE initiatives for an updated pedagogy, leadership development, and research-based faculty capacity building (AICTE, 2024; UGC, 2025); importantly, the findings also suggest significant differences across institution type and teaching experience, whereby faculty members associate equitably self-appraisal with teaching competencies with faculty of technical institutions often reporting a very marginally stronger engagement in relation with the structured appraisal and ICT related teaching competencies but more experienced faculty members demonstrating higher confidence and involvement in planning classroom delivery and professional leadership-though as higher education policies in India are being amended to incorporate blended and innovative pedagogical practices, relatively less experienced faculty members, are also displaying stronger orientation towards the digital space, such as greater use of blended teaching tools and online assessment platforms (Frontiers in Education, 2024; Gonzalez Hernandez et al., 2023); Finally, the results emphasize that solitary self-appraisal practices, especially self-reflection, yield better competencies and professional growth among faculty members working in supportive institutional environments where faculty mentoring, collegial reflection, quality cells, and targeted training opportunities are in place to help in converting self-appraisal to better developed competencies, indicating that self-appraisal works better when it becomes part of a supporting institutional culture practice rather than being treated as an isolated annual requirement (Harju & Akerlind, 2024; Frantz et al., 2024).

**Table: Major Findings of the Study.**

Sl. No.	Area of Analysis	Findings
1	Demographic Profile	The majority of respondents were male faculty members, most were in the 30–40 years age group, a large proportion held PhD qualifications, and most respondents were Assistant Professors.
2	Institution Type	Faculty from technical institutions formed a slightly higher proportion of the sample than faculty from management institutions.
3	Self-Appraisal Practices	Faculty members showed a <b>moderate to high level</b> of self-appraisal practices overall.

Sl. No.	Area of Analysis	Findings
4	Reflective Teaching	Among self-appraisal dimensions, reflective teaching recorded a high mean score, indicating that faculty regularly reflect on their teaching practices.
5	Goal Setting	Goal setting was found at a moderate to high level, showing that faculty members set professional and instructional goals for improvement.
6	Self-Monitoring	Self-monitoring was moderate, suggesting that not all faculty consistently track their own teaching performance.
7	Feedback Utilization	Feedback utilization was high, indicating that faculty actively use student and peer feedback for improvement.
8	Performance Review Participation	Participation in formal performance review systems was moderate, showing scope for strengthening institutional appraisal mechanisms.
9	Teaching Competencies Overall	Faculty demonstrated a generally <b>high level of teaching competencies</b> .
10	Subject Knowledge	Subject knowledge recorded the highest mean among competency dimensions, showing strong domain expertise among faculty.
11	Instructional Planning	Faculty scored high in instructional planning, indicating good preparation and lesson structuring.
12	Classroom Delivery	Classroom delivery was also rated high, showing effective teaching execution.
13	Student Engagement	Student engagement was moderate, suggesting the need for more interactive and learner-centered practices.
14	Assessment and Evaluation	Assessment and evaluation competencies were moderate to high, reflecting satisfactory but improvable evaluation practices.
15	ICT Usage	ICT usage recorded a moderate score, indicating the need for stronger digital teaching integration.
16	Communication Skills	Communication skills were rated high, revealing effective faculty interaction and content delivery.
17	Professional Growth Overall	Faculty showed a <b>moderate to high level of professional growth</b> .
18	Participation in FDPs	Participation in faculty development programmes was high, indicating strong engagement in professional learning.

Sl. No.	Area of Analysis	Findings
19	Research Involvement	Research involvement was moderate, suggesting that faculty engage in research but not at a very high level.
20	Publication Activity	Publication activity was moderate, indicating the need for improved research output and scholarly contribution.
21	Career Advancement	Career advancement was moderate to high, suggesting satisfactory professional progression among respondents.
22	Skill Enhancement	Skill enhancement scored high, showing faculty willingness to upgrade competencies.
23	Academic Leadership	Academic leadership was moderate, indicating that leadership development requires additional support.
24	Relationship: Self-Appraisal and Teaching Competencies	A strong positive correlation was found between self-appraisal and teaching competencies, indicating that better self-appraisal is associated with stronger teaching competence.
25	Predictive Effect	Regression results showed that self-appraisal significantly predicts teaching competencies.
26	Relationship: Self-Appraisal and Professional Growth	Self-appraisal was positively associated with professional growth, showing that reflective faculty tend to grow more professionally.
27	Relationship: Teaching Competencies and Professional Growth	Teaching competencies were positively related to professional growth, indicating that competent faculty are more likely to progress professionally.
28	Institutional Comparison	Technical institution faculty scored slightly higher than management institution faculty in self-appraisal, teaching competencies, and professional growth.
29	Group Difference	Significant differences were found between technical and management faculty with respect to major study variables.
30	Overall Interpretation	The findings confirm that self-appraisal is an important developmental tool that contributes to competency enhancement and professional growth among faculty.

### Discussion related to the study

The discussion section of the study states that the findings are in line with the existing literature on faculty development and reflective teaching, primarily confirming that self-appraisal methods are capable of improving teaching skills and professional development (Alharbi, 2020), which aligns with published literature indicating that reflective assessment

and quality feedback systems can enhance instructional delivery, classroom planning, and student engagement (Panadero et al., 2018; Postholm, 2018), and also extends this body of evidence by presenting geographical specific empirical data reported in North Karnataka, which is characterized by fast-growing higher education institutions but stagnant infrastructure, institutional assistance systems, and faculty development opportunities, thus producing new insights into the manner in which self-appraisal catalysis these transitions in semi-urban and limited-resource learning environments; it is also remarkable that faculty of technical institutions engage in self-appraisal and ICT-based competencies at relatively higher extents than the management faculty, which may be explained by robust regulatory frameworks, curriculum accreditations (such as NBA requirements), and the technical/engineering-centric instructional culture [12] evident among engineering faculty, whereas some business schools may rely to a larger degree on traditional pedagogies (both deduction and induction leading to the above hypothesis); at a theoretical level, the findings substantiate Reflexive Practice Theory, which holds that reflective professionals enhance performance by continuous and conscientious reflection of acts (Schön, 1987), and they also substantiate Human Capital Theory, given that techniques to improve competencies via self-appraisal would be associated with the higher personal output and institutional success level (Becker, 1993); institutionally, the conclusion indicates that self-appraisal would only be qualified to be effective to the extent it is amalgamated with enabling strategies such as mentoring, faculty development programmes and quality assurance systems like IQAC rather than being treated as an isolated evaluative mechanism; besides, the significant association between teaching competencies and professional growth signifies that there 'is a threshold' where skill development is a substantial facilitator in attaining either promotion, research output or leadership positions, and again describes recent trends discussed in global higher educational settings that also favour competency-based faculty professional learning and continual upskilling (Darling-Hammond et al., 2020) where such definitions as this work find application emerge from in that recent times where a significant number of higher educational faculty have been expected to accomplish the concurrency of teaching, research, and administrative responsibility where only those engaging in self-evaluation can grow with most productivity, innovation and alignment with institutional and/or policy directions, voltage and directing that self-evaluation is not an administrative tool, rather expected to be more of an analytical approach towards bettering the production of individual and institutional efficiency in higher educational settings.

### Implications of the Study

The practical, policy and academic implications of this study are substantial because the findings here suggest that self-appraisal can be truly impactful in enhancing teaching competencies and fostering professional growth only if it is integrated into a formal institutional system rather than merely a routine ritual exercise that is conducted once a year, a demand particularly important for the larger higher education system of India that distracted about 4.33 crore students in 2021-22 and is consequentially dependent on faculty quality for the sustainability of learning outcomes, employability and institutional credibility (Ministry of Education, 2024); from practical perspective, the study implies that institutions in the region of North Karnataka formalizing self-appraisal systems with defined competency indicators, periodic reflection templates and evidence based review formats to offer their faculties pathway to identify gaps in pedagogy, assessment, communication, research and digital teaching while academic development centres aligning their workshops, mentoring, and FDPs alongside the identified gaps, rather than conducting generic programmes to cater common needs, a need intensified with the recent revised Malaviya Mission Teacher Training Programme (April 2025), which accentuates academic leadership, research methodology, AI, design thinking, learner support and others targeted development themes for college and university teachers; the results also bear crucial implications for the institutional administrators that because, appraisal should be developmental and not only administrative, which means that self-appraisal reports should feed into mentoring, workload support, role allocation and individualized improvement planning because when a faculty member demonstrates strong subject knowledge but weak ICT enable teaching or assessment literacy, then based on this sustained reporting, the institution can plan an intervention with focused attention as opposed to a generalized training session, a method this been well documented to ease faculty development and improve knowledge, skills, and professional competence; from a policy perspective, the study findings corroborate the need for the introduction of NAAC and NBA-/AICTE aligned faculty review frameworks that utilise competency-based evaluation systems while embedding self-appraisal as a part of mentoring and promotion planning, particularly since NAACs quality framework focuses on institutional introspection and continual improvement as its commitment, while AICTE's handbook for 2024-27 on states foreground faculty development, skills integration, and quality oriented academic processes as a means to ascertain sustained academic output; finally academic relevance of the study lies in extending empirical evidence from a regional higher education setting to the literature on faculty development, and supporting recent scholarship that document that self-

reflection, is only effective when combined with collegial dialogue, structured feedback, and institutional support, which thereby positions North Karnataka to be a useful context in respect of identifying how faculty appraisal can help mould competency expansion tools to achieve sustainable faculty development in the long run, as opposed to a mechanism merely to ensure compliance with a dialectical', hierarchical effort to influence understanding and meet institutional goals in alignment with the revised NAAC framework.

### **Suggestions related to the study**

The study indicates that appraisals need to move away from informal, or compliance-based methods to structured self-appraisal formats that include clear indicators on reflective teaching, instructional planning, student-centred engagement, assessment, digital pedagogy, involvement in research, and professional framework, as the formal structure of the indicators allows the faculty to systematically identify both strengths and gaps, and also provides the institutions with actionable developmental data instead of routine paper work, which is increasingly necessary in the ever-expanding Indian higher education system, which enrolled around 4.33 crore students in 2021–22 (Ministry of Education, 2024), and where enhanced internal quality mechanisms are necessary to enable effective teaching at scale; it also indicates that faculty must be oriented and built capacity for reflective practice, goal setting, and evidence-based self-review, as recent higher education work demonstrates that self-reflection can be more efficacious if educators are offered structured tools, feedback, and experience interpretation avenues rather than merely being expected to reflect in an unstructured manner (Harju & Akerlind, 2024), as for instance, a recently appointed assistant professor trained on how to analyse student feedback, and assess lesson outcomes and set semester-wise goals, is more likely to improve classroom delivery, and assessment design compared to another who simply fills in an annual appraisal form; further, competency mapping must be integrated into annual appraisal systems so that the process identifies specific competency gaps in aspects like ICT usage, communication, research, knowledge, or academic leadership, which aligns with AICTE's quality-focused 2024–27 framework, and the increasingly apparent administrative shift towards measurable faculty capability development in technical and management education (AICTE, 2024; AICTE, 2024b); and on similar lines, professional development programmes should be tailored towards identified competency gaps instead of run as generic workshops, as the current faculty development policy at the national level formed under the Malaviya Mission Teacher Training Programme after a revision in April 2025, emphasises on targeted development in pedagogy, research,

leadership, technology, and learner support, which can support need-based training design (UGC, 2025); the study also suggests that management must create a supportive feedback mechanism, including peer review, and mentoring discussions, and IQAC or institutional quality assurance cell driven follow-up(s) as NAAC or national assessment and accreditation council continues to highlight the significance of internal quality assurance, quality enhancement, along with institutional strengths and weaknesses identification through systematic review processes (NAAC, 2024a, 2024b); and finally, periodic reviewing and mentoring systems should support self-appraisal so that reflection could translate into action, as self-appraisal is most likely to improve teaching competencies and professional growth when embedded in a supportive institutional culture comprising guidance, monitoring and developmental follow-up rather than being treated as a usual annual requirement (Harju & Akerlind, 2024).

## CONCLUSION

The study concludes that self-appraisal practices are meaningfully and strategically associated with teaching competencies and professional outcomes among faculty of technical and management institutions of North Karnataka, a finding which needs to be contextualized in contemporary Indian higher education where recent estimates show student enrolment exceeding nearly 4.33 crore in 2021–22 and institutions being increasingly challenged to improve instructional quality, accountability, employability outcome and accreditation performances by strengthening faculty capability systems (Ministry of Education, 2022); the empirical pattern resulting from the study reveals that regular reflective teaching, goal-setting and self-monitoring and feedback use are more likely to strengthen teaching competencies namely instructional planning, delivery, communication, assessment, and ICT-enabled pedagogy core skills, that further promotes all-round professional outcomes including participation in faculty development programmes, research engagement, publication activity, career advancement and academic leadership, a conclusion consistent with recent work suggesting that evidence-informed, albeit structured, self-reflection can help higher education teachers make sense of feedback from their teaching and convert it into practice (Harju & Akerlind, 2024; Barta & Mora, 2025); the conclusion also suggests that self-appraisal works best not as a stand-alone annual requirement but as an integrated institutional ecosystem which connects appraisal to mentoring, competency mapping, targeted training and periodic review, concepts which aligns closely with a revised Malaviya Mission Teacher Training Programme (April 2025) focusing on continued professional development in pedagogy,

research, leadership and emerging educational capabilities, and with the AICTE Approval Process Handbook 2024-27 which foregrounds faculty development and quality enhancement in technical and management education, and with NAAC's IQAC-driven quality culture, which consider internal review and continuous improvement as core to institutional excellence (UGC, 2025; AICTE, 2024; NAAC, 2024); thus, the study affirms that a thoughtfully designed self-appraisal system can be a pragmatic and policy-relevant tool for improving faculty effectiveness, fortifying institutional quality, and promoting continuous professional development in higher education, especially in regional contexts like North Karnataka where institutional diversity, uneven developmental opportunities, and the pressure of emerging quality expectations, make evidence-based faculty support system both necessary and timely.

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