
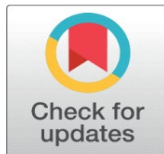


# DEVELOPING COMPETENT MANAGERS THROUGH PEDAGOGIC PRACTICES- A CONTRADICTION ANALYSIS FOR B-SCHOOLS OF NORTHEAST INDIA

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## ABSTRACT

With the rising demand for a “competent workforce” in the 21st-century business environment, Workplace learning is the centre stage of higher learning curriculum, which nobody can deny. In this direction management education plays its role as a path-leader. To nurture and prepare future managers for the changing requirements of the business world Bilimoria (2000), B-Schools can play a pivotal role. A plethora of research established on the issue of the “curriculum gap” to equip learners with the identified and relevant workplace competencies. Management education imparted by the B-schools and universities must deliver the most relevant workplace competencies.

It is very important that the present educational system broadens its scope and equips future graduates with the latest and relevant competencies as per the demand of the industry. Does it so in reality and practice? In the global arena of management education, Indian B-schools are not resistant to the pressures of the recent times requirements of the industries. To meet the interests of society, industry, government, and the global community in general, Indian business schools must reinvent their management education to ensure its relevance over time. The present study is an effort to delve into associating workplace competencies most desired by industry with relevant standard pedagogic practices and comprehend how they differ from each other, based on the students and faculty of the select B-schools who perceive the source of workplace competencies through the various educational practices by the Russel and Rao Proximity Analysis.

**Keywords:** Academic Bankruptcy, Curriculum Gap, Management Education, Workplace Competencies, Pedagogic Practices, Contradiction Analysis

## 1. INTRODUCTION

Generally, organizations today are in dire need of talent pools, skilled talents, and experts. Most multinational corporations suffer from finding and hiring competent employees for their operations. The competency level at the workplace is becoming a major concern for management in today’s organisations where there is an ongoing disruptive technology and a globally unpredictable competitive business environment. Predictions for the future include that technology will dominate much of the workspace. Currently, IT has revolutionized the nature of workspace within an organization thereby replacing HRM with an electronically led

HRM referred to as e-HRM; and the development of the Human Resource Information System (HRIS) as an integrated system of strategic information management to support strategic HR decision-making. Fresh graduates entering the workforce will need to adopt a high level of technology-based skills, customer-centric orientation and develop a progressive attitude to learn advanced skills. Further, leadership skills and the ability to mentor other trainees and sub-ordinates are considered important competencies in the workplace. Duncan Spencer, IOSH Head of Service, a leading health research firm stated that "Rapid change in the workplace due to technological disruption is going to be incessant [Wustemann \(2020\)](#). Future jobs will be emphasizing IT-enabled software applications that could facilitate workers with more autonomy and control over their work. Freelancers and Work-from-home workers will replace the orthodox office setup in the future. As technology will revolutionize the nature of modern workspace, a new avenue of research on the future workplace competencies and how the future graduates will respond to these megatrends will be of much relevance". Increasingly, the demand for competent managers in the workplace has increased as a result of the rapidly evolving business environment and disruption by technology. The researchers of today, need to acquire meaningful insights on the issues of development of the workplace competencies among the present and future graduates so that they can infuse the work-ready managers for the large business organizations.

- **SPENCER & SPENCER WORKPLACE COMPETENCY FRAMEWORK-** If we look at the definition of "competency" throughout history, we find that R.W. White coined the phrase as a notion for performance motivation in a piece he wrote in 1959. Planning the executive development programme was how Craig C. Lundberg defined competency in 1970. Additionally, [McClelland \(1973\)](#) study, "Testing for Competency Rather Than Intelligence," served as the impetus for the evolution of the concept of competency across several disciplines [Barman and Das \(2020\)](#). Several researchers have defined the term "competency" in terms of different contents as well as inherent dimensions such as main competency generic competency evaluation of competence among various others that may be named. Many academicians have exhaustively researched the subject matter of 'workplace competencies.' [Athey & Orth \(2009\)](#) view workplace competence as a set of those behaviours at work which are job-related. These skill demonstrations prepare personnel for employment. Generally speaking, there are two major categories comprising this area which are technical competencies plus behaviours based on them that form workplace elements. Competent at work workplace therefore means blending technical knowledge, and expertise coupled with cognitive functions (talents). Examples of personal; or behavioural; qualities associated with competencies developed due to a person's inner being can be found in ethics, attitudes, values, motivation or principles. Other globally recognized workplace competencies are teamwork, interpersonal relations, leadership, reading and writing skills in English, creativity and discovery, problem-solving ability/analysis/planning/organization etc. These job skills are important for getting a job and prospering in a career.

Today, much research is available on "competency modelling" which has been developed by researchers worldwide across various disciplines, wherein competency models were identified which connect competency and organizational goals as the pathway to achieve the aims and objectives of the organization. [Shippmann et al. \(2000\)](#) defined competency modelling as an art which enables in

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alignment of managerial work and roles to the business goals and strategies. Competency modelling is not an isolated activity but requires incorporating various workplace competencies; it involves collaborations that lead to a significant performance in the work organization. Although there are numerous workplace competency models, the Spencer, and Spencer Workplace Competency Framework for the 21<sup>st</sup> Century (1993) is the most prolific one. Many researchers are resolute that the items of the Spencer and Spencer Workplace Competency Framework are highly dependable in the context of the 21<sup>st</sup>-century global business environment.

[Spencer & Spencer \(1993\)](#) in their study entitled "Competence at Work- Models for Superior Performance" extensively explored the area of workplace competencies from various angles [Van den Brink et al. \(2003\)](#). In their study, 286 investigations of middle- to upper-level occupations at nearly all Fortune 500 organizations identified 24 workplace abilities as being most crucial for differentiating excellent performers from ordinary performance. In this framework, the 24 general workplace competencies represent 80–95 per cent of the differentiating characteristics for top performers in technical and managerial roles. The generic competencies for superior performance incorporated by [Spencer & Spencer \(1993\)](#) in their competency model are

- Teamwork and Cooperation,
- Flexibility, Relationship
- Building, Computer
- Literacy,
- Conceptual Thinking,
- Technical Expertise,
- Organizational awareness,
- Concern for Order Quality and Accuracy,
- Impact and Influence, Self-Initiative,
- Focus,
- Developing others,
- Directiveness,
- Team Leadership,
- Analytical Thinking,
- Self-Control,
- Organizational commitment,
- Willingness to learn,
- Interpersonal understanding,
- Self-Confidence,
- Planning and organizing skills,
- Written Communication,
- Information seeking,
- Achievement orientation.

**Source** also at URL <https://etd.uum.edu.my/>

Workplace learning has therefore occupied the centre stage in the curricula of higher education spawning the ever-evolving need for a "competent workforce" in

the 21st-century business environment. Professional management education must deeply realise that management education should play its role as the torch-bearer, and should nurture and prepare aspiring managers for the ever-changing demands of the corporate world [Bilimoria \(2000\)](#). According to many academics, there is a "curriculum gap" between what management education is now offered at B-schools and the relevant job competencies that employers of current business organisations want from incoming graduates. It is crucial that the current management education curriculum broadens its reach and educates students with the necessary skills before they enter the competitive business environment so that future managers can demonstrate the proper workplace competencies when they do so.

- **Management Education in India & B-schools in North East India:** Looking back at the development of business or management education in India, apparently before India's independence, formal business education never played a large role in the country's educational system. The earliest colleges to teach fundamental business concepts at the graduate level were Sydenham College in Bombay (1913) and Shri Ram College of Commerce in Delhi (1920), both of which placed a strong focus on trade and commerce rather than management. But in 1991, the LPG (Liberalization, Privatization, and Globalisation) Reforms gave management education in India a significant boost. With the expansion of private firms and the prominence of industrialization, management education rose to the top of the educational rankings in India. India experienced phenomenal growth in management institutions over the last three decades. Despite its rapid growth and popularity in India [Rajasulochana et al. \(2019\)](#) management education still currently experiencing a crisis. Due to several reasons, management education in India has proved its hopelessness in addressing the demands of the evolving work in the corporate environment.

According to the Associated Chambers of Commerce and Industry of India (ASSOCHAM) 2017 study, except for IIM graduates and excluding a few reputable colleges and the government-run Indian Institute of Management (IIMs) [Economic Times \(2016\)](#), only 7% of Indian MBA graduates are employable. In 2017, the report of ASSOCHAM stated that almost all 5,500 business schools were turning out with "un-employable" graduates who make less than Rs. 10,000 per month. Still, the graduates assume, they are lucky enough to land jobs at INR 10000. According to [Kumar & Dash \(2011\)](#), management education in India has not changed to meet industrial needs. The main reasons for the corrosion of management education in India are with absence of a dedicated government body and the domination by academically, and skill-wise bankrupt faculties with inflated credentials. Further explanations for the decline of management education in India include low-quality faculty who earn low salaries while working with a heavy workload, a lack of ongoing curriculum updation, a lack of improved corporate governance in B-schools, a very low priority placed on industry interaction and exposure to real industry problems, and a lack of customization as per students' and industry needs.

Management education has been extended across the seven states of India's NorthEastern States, which include Assam, Manipur, Mizoram, Meghalaya, Arunachal Pradesh, Nagaland, and Tripura, with over 50 B-schools offering MBA/PGDM/BBA programmes. More than 500 Management graduates pass every year from the B-schools of North East India. Despite the increase in the number of B-schools in North East India, these institutions also have deficiencies in a robust industrial collaborative ecosystem, resourceful infrastructure, and a scientific inquisition.

The principal organisation responsible for developing, approving, and directing all Indian B-schools is the All India Council for Technical Education (AICTE), which also ensures that the quality of management education in India meets or exceeds international standards. AICTE has acknowledged that even though there has been significant quantitative development in management education, India's management education still has to be improved to achieve international standards. The 107th Executive Body meeting of the AICTE has decided to quickly revise the management programme curriculum to enable students to align their skill sets with the dynamic needs of the corporate sector. The Dr Bhimaraya Metri Committee, 2018, released its recommendations for a revised model curriculum for the MBA and PGDM, which were made available to all management institutions in the nation. The committee crafted the curriculum mapping and programme structure for the MBA/PGDM programmes in India intending to develop competent managers in the future.

The Dr Bhimaraya Metri Committee, 2018 asserted that for high-quality management education in India, students of B-schools must acquire and disseminate job-related skills through experiential learning and action-based learning. The new MBA curriculum must offer a wide range of innovative focused pedagogic practices with a lot of flexibility and higher autonomy for each management institution. The innovative pedagogic practices should support widespread employment and entrepreneurship opportunities for future management graduates. From their review survey, the Dr. Bhimaraya Metri Review Committee for Model Curriculum for Management Program, AICTE (2018) suggested some innovative pedagogic practices which can be incorporated in the pedagogic practices of the B-schools in India: Team Building Exercises e.g. Group discussions, focussed group interviews, brainstorming sessions, etc., Case study techniques, Problem-solving, Role-playing, Mentoring, Live projects, Guest speakers, Study tours, Industry visits, Student exchange programs, Seminars and Workshops, Simulations or situational learning, Internships/Training/Summer placements, Online course portals provided by different educational institutions e.g. MOOC, SWAYAM, Entrepreneurial thinking in the emerging areas etc.

## **2. OBJECTIVES OF THE STUDY**

The present study will put an effort to fulfil the following objectives:

- 1) To study the extent of coverage of workplace competencies through the various pedagogic practices in the select B-schools of North East India;
- 2) To examine the inter-relationship between each item of workplace competencies with the different pedagogic practices and to determine whether any contradiction exists between the opinion of students and faculties of select B-schools of North East India.

## **3. RESEARCH METHODOLOGY**

The main intent of this study is to discover and examine the extent to which workplace competencies are emphasised by the B-School's pedagogical practice in the top B-schools in North East India; in the given exercise of imparting business curriculum; we are still fussy with the question "how pedagogical practises are helping students of North East India in developing their occupational competencies?". Is there any consensus among the students and teachers on the pedagogical practices in developing workplace competencies?

The research design is adopted here to explore the crux of these enquiries. The data and information collected for the study dictate to adoption of a qualitative-quantitative mixed descriptive research strategy to accomplish the objectives.

- **Variables of the Studies:** Various generic workplace competencies given by [Spencer & Spencer \(1993\)](#) are considered primary variables of the study. All the items incorporated by Spencer and Spencer under their research “Workplace Competency Framework” -24 generic competencies [Van den et al. \(2003\)](#).

Again, to study the coverage of workplace competencies through the various pedagogic practices, the different progressive pedagogic practices forwarded by Dr Bhimaraya Metri Committee in its Model Curriculum for Management Program (MBA and PGDM), the All India Council for Technical Education (AICTE) in 2018 were considered for this study. The various pedagogic practices are Classroom Teaching, Self – Study, Case Studies, Research Reports, Summer Internship, Performance Evaluation, Classroom Participation, Mid-Term tests, Workshops, Seminars, ICT/LCD/Video Lectures, Mentoring, Group Work, Business games, Expert Interaction, Mini Project, Industry Tours, Contradiction Analysis, Business modelling.

- **Sources of Data and Data Collection Technique:** The study involves both primary and secondary sources of data. The study adopted a survey-based data collection method through a structured questionnaire, to collect responses from the students who are currently undergoing management degree programs and faculties delivering management course curricula in the select B-schools of North East India. This survey-based method is based on the individual opinions, attitudes and perceptions of the students and faculties of the B-schools.
- **Sample Size and Sampling Technique:** The study involves the collection of responses from students undergoing management degree programs and faculties delivering management course curricula in 13 B-schools in North East India. The sampling technique followed in this study is non-probabilistic, particularly convenience sampling for selecting the samples (faculties and students) of select B-schools of the study.

An attempt was made to select a minimum of 10 students and 4 faculties from each B-school for the questionnaire survey. As per convenience, availability, and suitability, a total of 255 respondents comprising 196 students and 59 faculties were formally interviewed through a structured questionnaire to get an insight into the study. The distribution of the selected sample from 13 select B-schools of North East is displayed as follows:

**Table 1**

Table 1 Institute-Wise Distribution of Sample (Respondents)			
Name of State	Name of B-school	Student respondents	No. of faculty respondents
Assam	Assam Down Town University (ADTU)	15	4
	Assam Institute of Management (AIM)	20	4
	Gauhati University (GU)	20	4
	North East Regional Institute of Mgmt. (NERIM)	30	5
	Royal Global University (RGU)	20	4
	Guwahati Commerce College (GCC)	15	6
	Tezpur University (TUA)	10	4
Meghalaya	University of Science & Technology (USTM)	10	4

Tripura	Tripura University (TUT)	16	5
	ICFAI University, Tripura (ICFAI)	10	4
Arunachal Pradesh	NERIST, Nirjuli (NERIST)	10	6
	Rajiv Gandhi University (RJGU)	10	4
	Himalayan University (HU)	10	5
<b>Total</b>		<b>196</b>	<b>59</b>

- **Data Analysis Tool and Technique-** To address the objectives of the study, the research tools contained 24 items of workplace competencies given by Spencer and Spencer with the 21 nos. of pedagogic practices recommended by Dr. Bhimaraya Metri Committee, 2018. At first, descriptive statistics using mean score tabulation describes the overall level of coverage of workplace competencies by the pedagogic practices and accordingly, the B-schools are compared and classified. Further, to analyse the contradictions /dissimilarities as well as the proximities/similarities among the opinions of the respondents on each item of pedagogic practices toward the acquisition of workplace competencies, the Russell and Rao Contradiction Matrix has been applied. [Russel & Rao \(1940\)](#) distance measure has been administered to understand the contradiction in the opinion of the respondents on the importance of the various pedagogic practices towards the development of workplace competencies [Ling \(2010\)](#).

#### 4. DATA ANALYSIS AND INTERPRETATION

- **Coverage of workplace competencies through various pedagogic practices-** The study uses descriptive statistics like mean score and standard deviation to examine the extent to which workplace abilities are covered by pedagogical practices. The mean score on the extent to which the different pedagogical practises cover the different workplace competencies is computed to categorise the B-schools according to the extent of coverage as very low level, moderately low level, moderate level, moderately high level, and very high level. The table below illustrates the mean and standard deviation on the level of coverage of workplace competencies (institution-wise):

The mean score for the covering of workplace competency through the various pedagogical practises in the chosen B-schools ranges from 0.8 to 4.2, according to the aforementioned [Table 2](#). This investigation shows that pedagogical practises in B-schools in North East India range from a low to a relatively high level of coverage of workplace competencies. Additionally, it has been noted that B-schools namely NERIM, NERIST, TUA, and RGU emphasise increased use of innovative pedagogic practises for broader coverage/delivery of workplace competencies, in contrast to GU, HU, and NERIM, which place less emphasis on these practises. Additionally, the disparities in mean scores show that respondents from B-schools disagree about the efficacy of each pedagogical strategy in fostering the development of the 24 workplace competencies listed in the Spencer and Spencer Workplace Competency Framework (1993).

## 5. CONTRADICTION OF OPINION BETWEEN THE STUDENTS AND FACULTIES ON THE COVERAGE OF WORKPLACE COMPETENCIES THROUGH THE VARIOUS PEDAGOGIC PRACTICES

To analyse the difference between the level of awareness and acquired level of competence from the perception view of the students, similarity and dissimilarity is a fit methodology because it has been used by many researchers for several data mining techniques, such as clustering, nearest neighbour classification, and anomaly detection.

The Russell and Rao distance coefficient is one of the frequently utilised distance metrics used in the study. For binary or dichotomous variables, the distance measure introduced by Russell and Rao in 1940 is highly helpful. The Russell and Rao coefficient has an upper and lower boundary of 0 and 1 respectively, indicating that its value lies between 0 and 1. While 0 denotes no similarity, 1 denotes the greatest degree of similarity. [Ling \(2010\)](#).

The researcher contrasts the perspectives of the respondents (faculty and students) using this analysis to see where there is an agreement (similarity) and disagreement (contradiction) regarding various pedagogical practices used to teach/acquire workplace competencies. If the Russell and Rao proximity coefficient (RRPC), represented by "r," is greater than or equal to 0.4, it implies a higher degree of proximity or similarity between the respondents' opinions. This suggests that there is greater consensus among the respondents on the importance of a specific pedagogical strategy for fostering workplace competencies. In contrast, if the value of "r" is smaller than 0.1, it suggests greater disagreement or contradiction among respondents' perceptions of the efficacy of a specific pedagogical strategy for improving workplace competencies.

The Russell and Rao Matrix analysis of opinions of faculties and students on the coverage of various workplace competencies through the various workplace competencies is represented in [Table 1](#) to Table-24 of the Appendix. The elaborate interpretations of the Russell and Rao Matrix analysis (represented in [Table 1](#) to 24 of the Appendix) are described as follows:

- 1) **Contradiction analysis – Teamwork and Cooperation:** According to the findings of Russell and Rao's analysis of teamwork and cooperation (as represented in [Table 1](#) of the Appendix), the value of RRPC (r) ranges from 0.027 to 0.698. Pedagogical techniques like Contradiction analysis (0.027) and Performance Management (r=0.027) exhibit a low value of RRPC. This suggests that the importance of these pedagogical practices for the growth of teamwork and cooperation is very contradictory or diverse among students and faculty. A significant degree of similarity amongst the respondents is also shown by the high value of RRPC for classroom teaching (r=0.616), case studies (r=0.431), classroom participation (r=0.675), and group work (r=0.698). This indicates that group projects, case studies, classroom participation, and classroom teaching are considered to be the most effective ways to learn teamwork and cooperation.
- 2) **Contradiction analysis – Flexibility:** From the Russell and Rao analysis of Flexibility (as represented in [Table 2](#) of the Appendix), it is seen that the value of RRPC (r) varies from 0.024 to 0.545. The lowest value of RRPC is seen in pedagogic practices like mid-term tests (r=0.024) and Contradiction Analysis (r=0.027). This means students and faculties show lower



agreement on the implication of Mid-term tests and Contradiction analysis pedagogic toward the development of flexibility. Also, the value of RRCP is highest in the case of Classroom Teaching ( $r=0.545$ ), Classroom Participation ( $r=0.486$ ), and Group work ( $r=0.463$ ), which indicates a high level of similarity/proximity among the respondents.

- 3) **Contradiction analysis – Relationship Building:** Referring to Table 3 of the Appendix, the Russell and Rao analysis for relationship building shows that the value of RRCP( $r$ ) ranges from 0.043 to 0.608. In pedagogical procedures like performance evaluation ( $r=0.043$ ), midterm exams ( $r=0.043$ ), workshops ( $r=0.047$ ), and contradiction analysis ( $r=0.047$ ), there is a contradiction in viewpoint. Furthermore, there is significant agreement among the respondents when it comes to group work ( $r=0.576$ ), classroom participation ( $r=0.608$ ), and classroom teaching ( $r=0.541$ ).
- 4) **Contradiction analysis – Computer Literacy:** The value of RRCP( $r$ ) ranges from 0.027 to 0.671 according to the Russell & Rao analysis for computer literacy (given in Table 4 of the Appendix). The pedagogical practices like Industry visits ( $r=0.27$ ), Expert Interaction ( $r=0.27$ ), Mid-term examinations ( $r=0.27$ ), and Business Games ( $r=0.027$ ) have the highest amount of contradiction/dissimilarity. The three categories of classroom teaching ( $r=0.671$ ), self-study ( $r=0.522$ ), and classroom presentation ( $r=0.404$ ) have the most similar opinions.
- 5) **Contradiction analysis – Conceptual Thinking:** The value of RRCP ( $r$ ), according to Russell & Rao's examination of Conceptual Thinking (shown in Table 5 of the Appendix), ranges from 0.031 to 0.631. The pedagogical practices Industry Tours (RRCP = 0.031) and Mini-Project (RRCP = 0.027) have the lowest values, indicating a high degree of discrepancy in these practices. The cases of classroom teaching ( $r=0.557$ ), self-study ( $r=0.518$ ), case study ( $r=0.631$ ), classroom participation ( $r=0.455$ ), and ICT/video lectures ( $r=0.408$ ) show the highest similarity in opinion.
- 6) **Contradiction analysis – Technical Expertise:** The value of RRCP( $r$ ), according to Russell & Rao's examination of Technical Expertise (see Table 6 of the Appendix), ranges from 0.043 to 0.553. Mid-Term Exams ( $r=0.043$ ), Industry Tours ( $r=0.043$ ), Expert Interaction ( $r=0.047$ ), and Assignment ( $r=0.047$ ) show the highest amount of contradiction towards the development of Technical Expertise. Additionally, the results of the RRCP test indicate that classroom instruction ( $r=0.553$ ) and ICT/video lectures ( $r=0.494$ ) are the two methods that most closely align opinions.
- 7) **Contradiction analysis – Organizational Awareness:** From the Russell & Rao Matrix analysis of Organizational awareness (represented in Table 7 of the Appendix), it is seen that the RRCP ( $r$ ) value varies from 0.051 to 0.553. The level of contradiction in the opinions of respondents is highest in the case of Self-study ( $r=0.051$ ) and Mid-term tests ( $r=0.051$ ). Also, greater similarity in the opinions of the respondents is seen in the case of Classroom Teaching ( $r=0.553$ ), Case-Study ( $r=0.420$ ) Internship ( $r=0.424$ ), and Business Modelling ( $r=0.435$ ).
- 8) **Contradiction analysis – Order, Quality, and Accuracy:** The RRCP( $r$ ) value ranges from 0.086 to 0.675, according to the Russell and Rao Matrix analysis on concern for order, quality, and accuracy (shown in Table 8 of the Appendix). Only business games ( $r=0.086$ ), which have the most contradiction and dissimilarity, have the lowest RRCP score. Additionally,

the cases of classroom teaching ( $r=0.675$ ) and self-study ( $r=0.467$ ) show the highest similarity/proximity in opinions.

- 9) Contradiction analysis – Impact and Influence:** From the Russell & Rao Matrix analysis on Impact and Influence (represented in Table-9 of the Appendix), it is found that RRCP( $r$ ) varies from 0.055 to 0.580. The lowest value of RRCP (implying the highest contradiction in opinions of respondents) is found in the case of ICT/Video Lectures( $r=0.055$ ) and Mini-Projects ( $r=0.059$ ). Additionally, the value of RRCP is highest for group work ( $r=0.416$ ), self-study ( $r=0.431$ ), classroom participation ( $r=0.447$ ), and classroom teaching ( $r=0.580$ ), indicating that students and faculty members value these pedagogical practices for fostering impact and influence.
- 10) Contradiction analysis – Self-Initiative:** From the Russell & Rao Matrix analysis on Self-initiative (refer to Table-10 of the Appendix), the RRCP( $r$ ) value varies from 0.031 to 0.533. The highest contradiction among respondents is found in the case of Classroom presentation( $r=0.031$ ), Research Reports( $r=0.035$ ), Industry tours ( $r=0.031$ ), and Contradiction analysis ( $r=0.031$ ). The highest similarity among respondents is seen in Classroom Teaching ( $r=0.533$ ), Self-Study ( $r=0.408$ ), Classroom Participation ( $r=0.427$ ), and Group Work ( $r=0.412$ ).
- 11) Contradiction analysis – Service Orientation:** The value of RRCP( $r$ ) varies from 0.024 to 0.533, according to the Russell & Rao analysis on service orientation (tabulated in Table 11 of the Appendix). Case studies ( $r=0.027$ ), contradiction analysis ( $r=0.024$ ), and self-study ( $r=0.024$ ) all had higher levels of contradiction or dissimilarity in opinions. Alternately, Classroom Teaching ( $r=0.533$ ) is the only topic where there is the greatest degree of similarity in viewpoints.
- 12) Contradiction analysis – Developing others:** From the Russell & Rao Matrix analysis on Developing others (refer to Table-12 of the Appendix), the value of RRCP( $r$ ) varies from 0.016 to 0.478. The highest level of contradiction in opinions among respondents is found in Self-study( $r=0.016$ ), Research reports ( $r=0.016$ ), and Contradiction analysis ( $r=0.016$ ). Again, proximity/similarity in opinion is highest in the case of Classroom Teaching ( $r=0.431$ ), and Classroom Participation ( $r=0.478$ ).
- 13) Contradiction analysis – Directiveness-** According to Table 13 of the Appendix's Russell & Rao Matrix analysis on Directiveness, the RRCP ( $r$ ) ranges from 0.016 to 0.475. The highest amount of contradiction/dissimilarity is indicated by the lowest value of RRCP,  $r=0.016$ , which is evident in the cases of Self-study, Research Reports, Contradiction Analysis, and Business Modelling. On the other hand, classroom participation ( $r=0.467$ ) and classroom teaching ( $r=0.475$ ) show greater appreciation/similarity among the views of the respondents.
- 14) Contradiction analysis – Team Leadership:** In the Russell & Rao Matrix analysis on Team Leadership (refer to Table-14 of the Appendix), the value of RRCP( $r$ ) varies from 0.027 to 0.588. The low value of RRCP is  $r=0.027$  which is seen in the case of Research Reports, Workshops, ICT/Video Lectures, Industry tours, and Contradiction analysis, where there is a higher level of contradiction of opinion. Additionally, classroom teaching, classroom participation, and group work all have the highest correlations with similarity of opinion ( $r=0.576$ ,  $r=0.588$ , and  $r=0.439$ , respectively).

- 15) Contradiction analysis – Analytical Thinking:** From the Russell & Rao Matrix analysis on Analytical thinking (refer to Table-15 of the Appendix), the value of RRCP(r) varies from 0.031 to 0.604. The highest level of contradiction in opinion is seen in ICT/Video Lectures ( $r=0.031$ ), and Expert Interaction ( $r=0.031$ ). Again, the higher similarity in the opinion of the respondents is seen in Classroom Teaching ( $r=0.522$ ), Self-study ( $r=0.412$ ), Case study ( $r=0.604$ ), and Business games ( $r=0.424$ ).
- 16) Contradiction analysis – Self-control:** The value of RRCP(r) varies from 0.020 to 0.514, according to the Russell & Rao Matrix study on self-control (shown in Table 16 of the Appendix). Mini-Project ( $r=0.020$ ), Industry tours ( $r=0.020$ ), and Contradiction analysis ( $r=0.020$ ) all show higher levels of contradiction. Additionally, a higher degree of agreement between respondents' opinions was seen for group work ( $r=0.419$ ), self-study ( $r=0.514$ ), and classroom participation ( $r=0.411$ ).
- 17) Contradiction analysis – Organizational Commitment:** The value of RRCP(r) ranges from 0.032 to 0.470 according to the Russell & Rao Matrix analysis on increasing organisational commitment (shown in Table 17 of the Appendix). Performance evaluation ( $r=0.032$ ), Mid-term exams ( $r=0.032$ ), mentoring ( $r=0.032$ ), and business games ( $r=0.032$ ) all show a higher level of disparity. Additionally, classroom participation ( $r=0.403$ ) and teaching in the classroom ( $r=0.470$ ) have the highest correlations with proximity/similarity of opinion.
- 18) Contradiction analysis – Willingness to Learn:** From the Russell & Rao Matrix analysis on Willingness to Learn (refer to Table-18 of the Appendix), it is seen that the value of RRCP(r) varies from 0.059 to 0.655. The highest level of contradiction in opinion is found in Performance Assessment ( $r=0.059$ ) and Contradiction analysis ( $r=0.059$ ). However, the highest similarity in the opinion of respondents is found for Classroom Teaching ( $r=0.569$ ), Self-study ( $r=0.655$ ), and Case study ( $r=0.400$ ).
- 19) Contradiction analysis – Interpersonal Understanding:** The RRCP(r) value ranges from 0.020 to 0.445 according to the Russell & Rao Matrix analysis on interpersonal comprehension (see Table-19 in the Appendix). When it comes to midterm exams ( $r=0.020$ ), industry visits ( $r=0.020$ ), and contradiction analysis ( $r=0.020$ ), there is a larger level of disagreement in opinions. Additionally, the respondents indicated that group work ( $r=0.445$ ) was the most effective pedagogical strategy for fostering interpersonal understanding.
- 20) Contradiction analysis – Self-Confidence:** From the Russell & Rao analysis on Self-Confidence (represented in Table 20 of the Appendix), it is seen that the value of RRCP(r) varies from 0.024 to 0.533. The highest level of contradiction/dissimilarity is found in Assignment ( $r=0.024$ ), and Contradiction analysis ( $r=0.024$ ). Again, the similarity/proximity in opinion is highest in the case of Classroom Teaching ( $r=0.451$ ), Self-study ( $r=0.455$ ), and Classroom Participation ( $r=0.533$ ).
- 21) Contradiction analysis – Planning and organising skills:** According to Table 21 of the Appendix's Russell & Rao Matrix Analysis of Planning and Organising Skills, the value of RRCP(r) ranges from 0.028 to 0.510. Performance evaluation ( $r=0.028$ ) and business games ( $r=0.028$ ) display the highest level of disagreement across opinions. Additionally, classroom participation and classroom teaching have the highest correlations between respondents' opinions ( $r=0.502$  and  $r=0.510$ ).

**22) Contradiction analysis – Written Communication:** From the Russell & Rao analysis of written communication skills (represented in Table 22 of the Appendix), the value of RRCP(r) varies from 0.027 to 0.596. A much higher contradiction level is displayed in the case of Performance assessment (r=0.027), Seminars (r=0.027), Group work (r=0.027), Business Games (r=0.027), Industry tours (r=0.027) and Contradiction analysis (r=0.027). Moreover, similarity in opinion is highest in the case of Classroom Teaching (r=0.596), Self-study (r=0.408), and Research reports (r=0.408).

**23) Contradiction analysis – Information seeking:** The value of RRCP(r) ranges from 0.027 to 0.576 according to the Russell and Rao Matrix analysis on Information Seeking (see Table 23 in the Appendix). Mid-term tests and the Mini-Project have the highest levels of disagreement/contradiction in the respondents' opinions (r=0.027 and r=0.027, respectively). In contrast, the cases of classroom instruction (r=0.576), self-study (r=0.408), case study (r=0.420), and research report (r=0.416) show the highest proximity in opinions of the respondents.

**24) Contradiction analysis – Achievement orientation:** According to Table 24 of the Appendix's Russell & Rao Matrix analysis on information seeking, the value of RRCP (r) ranges from 0.063 to 0.486. Business Games and business modelling have the largest correlations between respondents' contradictory opinions (r=0.063 and r=0.063, respectively). Additionally, the value of the RRCP is highest for classroom teaching alone (r=0.486), indicating that students and faculty believed classroom teaching to be the most important pedagogical strategy for fostering achievement orientation.

From the above discussions from Para-(i) to (xxiv), it is observed that the value Russell and Rao coefficient of Proximity (RRCP) varies from 0.01 to 0.68, which means the values are within the boundary limit of 0 to 1. The table exhibits the various pedagogic practices on which the respondents show a higher level of contradiction (disagreement) and a higher level of proximity (agreement) towards the acquisition of the respective workplace competencies:

**Table 2**

**Table 2 Pedagogic Practices on Which There is Higher Proximity/Contradiction-Students and Faculties**

Table No.	Workplace Competency	Pedagogic practices showing higher proximity/similarities	Pedagogic showing higher contradiction/dissimilarities
1.	Teamwork & Cooperation	Classroom Teaching, Classroom Participation, Case study, Group Work	Self-study, Case study, Contradiction analysis
2.	Flexibility	Classroom Teaching, Classroom Participation, Group Work	Mid-term test, Contradiction analysis
3.	Relationship Building	Classroom Teaching, Group Work, Classroom Participation	Performance assessment, Mid-term tests, Workshops, Contradiction analysis
4.	Computer Literacy	Classroom Teaching, Self-Study, Classroom Presentation	Industry tours, Expert Interaction, Mid-term tests, Business Games
5.	Conceptual Thinking	Classroom Teaching, Self-Study, Case Study, Classroom participation, ICT/LCD Video Lectures	Industry Tours, Mini-Project

6.	<b>Technical Expertise</b>	Classroom Teaching, ICT/LCD Video Lectures	Mid-term tests, Industry Tours, Expert Interaction, Assignment
7.	<b>Organizational awareness</b>	Classroom Teaching, Case Studies, Internship, Business Modelling	Self-Study, Mid-term tests
8.	<b>Order, quality &amp; accuracy</b>	Classroom Teaching, Self-study	Business Games
9.	<b>Impact and Influence</b>	Classroom Teaching, Self-study, Classroom participation, Group Work	ICT/Video Lectures and mini-projects
10.	<b>Self-Initiative</b>	Classroom Teaching, Self-study, Group Work, Classroom Presentation.	Classroom presentations, Research reports, Industry tours, Contradiction analysis
11.	<b>Service orientation</b>	Classroom Teaching	Self-study, Case study, Contradiction analysis
12.	<b>Developing others</b>	Classroom Teaching, Classroom participation	Self-study, Research reports, Contradiction analysis
13.	<b>Directiveness</b>	Classroom Teaching, Classroom participation	Self-study, Research Reports, Contradiction analysis, Business Modelling
14.	<b>Team Leadership</b>	Classroom Teaching, Classroom participation, Group Work	Research Reports, Workshops, ICT/Video Lectures, Industry tours, Contradiction analysis
15.	<b>Analytical Thinking</b>	Classroom Teaching, Self-Study, Case Studies, Business Games, Business Modelling	ICT/Video Lectures, Expert Interaction
16.	<b>Self-Control</b>	Self-Study, Classroom participation, Group Work	Mini Project, Industry tours, Contradiction analysis
17.	<b>Organizational Commitment</b>	Classroom Teaching, Classroom Participation	Performance assessment, Mid-term tests, Mentoring, Business games
18.	<b>Willingness to learn</b>	Classroom Teaching, Self-Study, Case Studies	Performance Assessment, Contradiction analysis
19.	<b>Interpersonal Understanding</b>	Group Work	Mid-term tests, Industry tours, Contradiction analysis
20.	<b>Self-Confidence</b>	Classroom Teaching, Self-Study	Assignment, Contradiction analysis
21.	<b>Planning and Organizing skill</b>	Classroom Teaching, Classroom participation	Performance assessment, Business Games
22.	<b>Written communication</b>	Classroom Teaching, Self-Study, Research reports.	Seminars, Group work, Business Games, Industry tours,
23.	<b>Information seeking</b>	Classroom Teaching, Self-Study, Case studies, Research Reports	Mid-term tests, Mini-Project
24.	<b>Achievement orientation</b>	Classroom Teaching	Business games, Business modelling

Table 2 reveals that classroom instruction is regarded as the most effective pedagogy for fostering the acquisition of the study's professional abilities by both students and faculty at the select B-schools in the Northeast. This indicates that the traditional and theoretical classroom teaching technique is still used in B-schools in North East India. The respondents agree that group work, self-study, and classroom involvement are crucial pedagogical strategies for helping students develop a range of occupational competencies. A few respondents have also supported the use of case studies, research reports, classroom presentations, and self-study to develop workplace competencies.

On the other hand, there is more disagreement or contradiction among respondents' opinions towards certain pedagogical techniques, such as contradiction analysis, business modelling, mini-projects, midterm exams, industry trips, ICT/video lectures, mentoring, seminars, etc. According to the respondents, these pedagogies do not help the development of workplace competencies. Although the Dr Bhimaraya Metri Committee for AICTE MBA PGDM Course Curriculum 2018 favoured the extensive use of innovative and action-based learning pedagogic practises for all-round development and acquisition of workplace competencies, it is discovered that faculty and students of the B-schools of the North East have not yet placed a strong emphasis on these practises. The B-schools of North East are yet to emphasize innovative pedagogic practices like ICT, Business modelling, Contradiction analysis, Mentorship, etc.

## 6. CONCLUSION

We could reaffirm the contradictions among the B-Schools surveyed from North East India, that the B-Schools are developing the competent managers under Spencer & Spencer matrices, and the contents of competences. There is no direct agreement of opinions among the future managers that the B-Schools teach the competencies as per the requirement of the workplace of the present and even the future. There are huge gaps in B-School's pedagogic practices among the learners as well as the trainers and teachers in imparting workplace competency-based teaching. The study revealed a contradiction in developing managerial and workplace-related competencies in the areas of self-study, Case study, Performance assessments, Mid-term tests, Workshops, Industry tours, Expert Interaction, Business Games, Industry Tours, Mini-Project, Expert Interaction, Assignments, Self-Study, ICT/Video Lectures and Mini Projects, Classroom presentations, Research reports Case studies, Research reports, Business Modelling, Research Reports, Workshops, Performance assessment, Mentoring, Assignment, Seminars, Group work, Classroom presentation.

This revelation can serve as input for developing human and managerial competence through pedagogic practices at the B-Schools in North East India. Students and teachers/trainers will be able to design their strategies for competence-related issues at B-Schools. Future research may also be replicated for the evaluation of B-Schools curriculum administration and management for management professionals. If the competencies for the workplace are not taught by B-Schools through pedagogic practices then what does the management teaching teach? - is a serious question.

## CONFLICT OF INTERESTS

None.

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