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From Chalks To Stylus: Teaching Efficacy During Covid-19 In Ahmedabad City

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Abstract: As a part of the consequence of the Covid-19 pandemic situation, a lot of schools in Ahmedabad, Gujarat; India closed in March 2020. Teachers were asked to adapt to online teaching with training and workshops related to technology been provided to them from their respective schools.

The worldwide pandemic situation caused by the Corona virus disease (Covid-19) has led to a state of despair for a lot of sectors. The education system changed dramatically with distinctive rise of e-learning platforms. There was a sudden shift from the classrooms in many parts of the globe, wondering whether the adoption of e-learning will continue post pandemic. The descriptive study demonstrates how the education system was re-designed to provide students teachers with opportunities to learn and teach online. The paper presents the results of a survey conducted in August and September, 2020 based on teaching efficacy during the times of Covid.

Analysis of potential factors such as school- computer technology, teacher- education learning techniques, Information and communication technology tools (ICT) access etc.

Findings from regression analysis show changes in the teacher competence and teacher education opportunities to learn digital competence.

Index Terms - Teaching efficacy, Teacher education, pandemic education situation, teacher competence, schools in Ahmedabad

I. INTRODUCTION

During the 2019 Covid virus (pandemic situation) has led to a number of challenges both for the teachers as well as the students. The schools faced a lot of challenges in terms of online teaching transition. The first half of 2020 witnessed a lot of schools to close due to the lockdown. All schools were required to shift to the online teaching mode.

However, much is still unknown about the nationwide practice of online teaching across all levels of schools in the state. Lack of experience in online teaching, separation of teachers from students, school administrative process and unsatisfactory student academic performance were identified as the major associated factors. The study thus concluded that teachers' online teaching efficacy for technology application increased among school teachers in Gujarat during COVID-19 school lockdown.

of five years. The time series monthly data is collected on stock prices for sample firms and relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE -100 Index is taken from yahoo finance.

II. LITERATURE REVIEW

Prior to Covid-19, various forms of online teaching were in existence in terms of distance education and other open courses. The transition of online teaching as a result of Covid-19 brings about number of challenges both from the teacher's and student's perspective.

Teachers face restrictions with online teaching as compared to face-to-face teaching. The need to replace physical classroom sessions with online teaching cannot be changed over time during natural disasters, crises or pandemic. Compared with the physical classroom teaching, teachers reported spending extra time to accustom themselves to the online teaching environment, designing methods to engage with students and knowing individual students' comprehension of the teaching content (Scull et al. 2020). These challenges were associated with the separation between teachers and their students as opposed to the conventional classroom teaching (Moore 2014) and/or lack of online teaching experience (Johnson et al. 2020). For instance, teachers can enhance the teacher-student connectedness using facial expressions and body languages, whose influences could be affected in an online context, which leads to greater reliance on voice communication (Bao 2020). Teacher self-efficacy (TSE) has been described as a subjective indicator of the extent to which teachers can achieve specific tasks in the teaching profession and has been one of the most studied constructs in teacher education (Morris et al. 2017).

The transition to online teaching as a result of COVID-19 has been a significant undertaking for educators worldwide. While the circumstances were challenging, it has also accelerated the integration of technology in education and opened up new possibilities for flexible and inclusive learning environments.

The COVID-19 pandemic has led to a widespread transition from traditional face-to-face teaching to online teaching across educational institutions worldwide. This shift has had a profound impact on the education sector, prompting educators to adapt their teaching methods and embrace online platforms to continue delivering instruction.

III. RESEARCH METHODOLOGY

RESEARCH DESIGN:

Research Design is a framework for research and the research approaches could be classified into three categories of research which are Exploratory, Descriptive and Causal. This study is conducted with explanatory research as the study needs to investigate the impact of servant leadership on employee performance. The explanatory research design involves formulating of the hypothesis and collecting the data to achieve the objectives.

Quantitative method has been used as teaching efficacy is measured with the adaption to the pandemic for the study. It will help in analyzing the information statistically to achieve its objectives.

RESEARCH OBJECTIVES

To know the impact of Covid-19 on teaching efficacy.

To investigate the changes in online teaching during the COVID-19 school lockdown in the state.

To collect information to investigate their moderation effects on changes in online teaching.

To understand the adaptability situation with the help of this study.

3.1 Data Collection

The most suitable data collection method for this study is through questionnaires. So, primary data will be collected by teachers of different schools in Gujarat in terms of questionnaires based on five-point Likert Scale. The Likert scale format is: 1) Agree 2) Neutral 3) Disagree 4) Strongly agree and 5) Strongly disagree

The development of the questionnaires is based on the following variables: teaching efficacy and covid online base teaching. Servant leadership pertaining to factors such as generosity, humility, supportive attitude, caring and understanding, while employee performance is compared with democratic, autocratic and servant leadership styles

Questionnaires were distributed to a total of 200 teachers using convenience sampling method from different schools in Gujarat with affiliations such as ICSE, CBSE, Gujarat Board and other.

However only 120 respondents were received. 9 respondents did not complete the questionnaire, which gives a total of 111 valid responses. Hence, a total of 60 percent valid response rate.

3.2 ACCESSIBILITY AND ETHICAL ISSUES

Consent of the involving parties was taken before carrying out the investigation. The researcher ensures no revelation of the identity or other personal information. The researcher made sure no violation of responses arose.

3.3 DATA ANALYSIS

This study involved quantitative approach using statistical tools to evaluate the collected data, facts and figures. SPSS (Statistical Package for the Social Sciences) has been deployed to conduct meaningful conclusions. Demographic Analysis, Descriptive Analysis, Data Analysis was conducted by using SPSS to determine the impact of online teaching on teachers and student's performance in the state of Gujarat. Demographic Analysis: Demographic analysis is a statistical technique used to develop and measure the dynamics and dimensions of the population.

DEMOGRAPHICS OF RESPONDENTS:

Functional department: Most of the respondents are from all the functional areas.

Tenure: The years of experience varies and starts with lowest 0 – highest 20 years of experience of teaching in schools.

The educational level bifurcation of teachers was quantified in terms of their graduation, post-graduation and diploma degrees, making the data more reliable in terms of knowledge and experience of their hierarchical positions.

The demographic analysis of this research was measured by gender, age and work experience. Gender was categorized into males and females: 23 males and 88 females. Age was grouped into under 25, 25-35, 36-45 and 45 & above. The frequency of the respondents are 20, 30, 33 and 28 respectively.

Table 2 Demographic analysis

Variables		Frequency	%
Gender	Female	88	80.73%
	Male	23	19.27%
Age	under 25	20	15.60%
	25-35	30	27.52%
	36-45	33	30.28%
	45 and above	28	26.61%

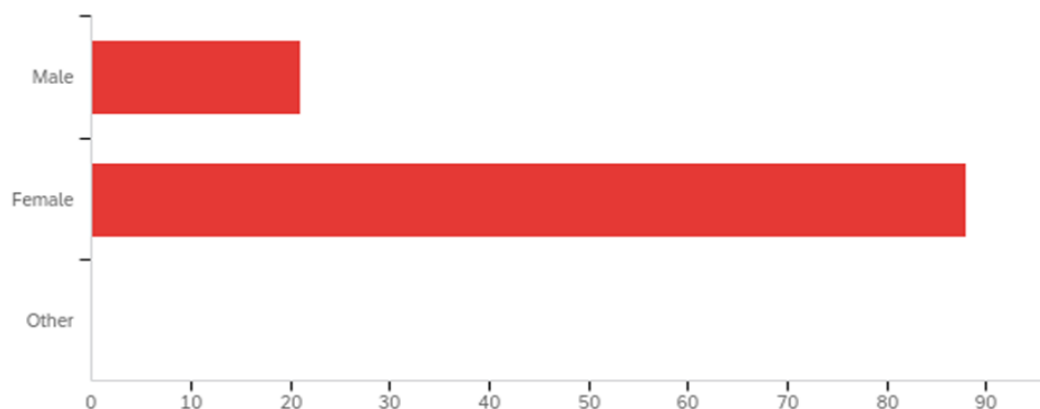


Table 3 Moderation effects of adaptability in the teaching efficacy due to Covid-19 Pandemic

Variable	β	SE	t	p
Online instruction	0.495	0.175	2.825	0.005
Adaptability	0.33	0.138	2.386	0.018
Effectiveness	0.198	0.177	-1.121	0.263
Technology	419	0.188	2.231	0.026

The study examines the teaching efficacy of teachers during the COVID-19 pandemic and the role of adaptability as a moderator. The study collects data from a sample of teachers and measures their levels of adaptability, teaching efficacy, and the impact of the pandemic on their teaching. The study then explores how adaptability affects the relationship between the pandemic and teaching efficacy.

Based on this data, some potential findings include:

Positive moderation effect: Teachers with high levels of adaptability demonstrate increased teaching efficacy despite the challenges posed by the pandemic. They are better able to adjust their teaching methods, utilize technology effectively, and engage students in meaningful ways. In this case, adaptability acts as a protective factor, enhancing teaching efficacy during the pandemic.

Negative moderation effect: Teachers with low levels of adaptability struggle to maintain teaching efficacy during the pandemic. They may find it challenging to adapt to online teaching platforms, struggle with technological issues, and face difficulties in engaging students effectively. In this scenario, the lack of adaptability hampers teaching efficacy in the face of the pandemic.

No moderation effect: The study might find that adaptability does not significantly influence the relationship between the pandemic and teaching efficacy. In this case, other factors such as technological resources, teacher experience, or external support may play a more significant role in determining teaching efficacy during the pandemic.

Table 6 Emerging themes about challenges experienced in online teaching during COVID-19 (n = 111)

Themes	Exemplary quotes
Engaging with students	"It's easy for student to lose their attention"
Technology	"Not familiar with applying technology in online teaching"
Workload	"Too much time spent on restructure the lesson online"
Student supervision	"It's difficult to supervise students in time"
Student management	"How to control students' behaviour online?"

RESULTS: Quantitative data

Open-ended question

Of the 111 teachers who filled in the open-ended questions about the major challenge(s) they experienced during online teaching, various themes emerged (Table 6) above.

Theme 1: Engaging with students

The data reported that, the online teaching has separated them from their students. Teacher's sometimes couldn't see the students on such interface and even had to mute them sometimes due to the noise issues in online sessions. Teachers were unable to detect student's understanding immediately.

Theme 2: Technology

One of the main challenges with technology is the lack of familiarization with the technological devices or digital devices. The lack of usage of digital devices in terms of even understanding the technical operations related to them was a challenge so far. Reported problems related to technology was online video editing, uploading documents, software usages and internet connectivity issues.

Theme 3: Workload

It was reported from the data that the number of working hours increased from pre-covid phase to covid phase. The daily productive working hours increased from 3-4 to 5-6 hours. And it affected into an increase in the weekly working hours as well. A lot of administrative work increased along with teaching.

Theme 4: Student Supervision

The inability to provide supervision was also reported. Chatting windows were a disadvantage to understand the issues and problems students face during online sessions. Students were even reported of cheating during tests and identical answers were reported during assignments and projects.

Theme 5: Student Management

Student management was the bigger challenge for a few as the data reported that, managing students on online platforms became difficult. As teachers had to mute them time & again which would hinder the class or they weren't keeping their videos on, on time. Few became inattentive even during online sessions as they could just start the class and not be interactive in the same.

The students sometimes would not understand the content hence the teachers had to give instructions again & again or conduct additional tutorial sessions as well.

EMERGING THEMES

There are some potential emerging themes related to the challenges experienced in online teaching during the COVID-19 pandemic:

Technological difficulties: Participants may have encountered various technical challenges, such as connectivity issues, software or platform compatibility problems, lack of access to necessary equipment or devices, and limited digital literacy skills. These difficulties could hinder effective online teaching and learning experiences.

Engagement and interaction: Online teaching may have posed challenges in maintaining student engagement and fostering meaningful interaction. Participants may have struggled with creating interactive activities, promoting student participation, facilitating group work or discussions, and ensuring effective communication between students and instructors.

Pedagogical adaptation: Shifting from traditional face-to-face instruction to online teaching likely required instructors to adapt their teaching methods and approaches. Participants may have faced challenges in

modifying their instructional strategies, designing online assessments, ensuring content relevance and clarity, and providing effective feedback in an online environment.

Student motivation and accountability: Participants may have noticed challenges related to student motivation and accountability in the online setting. Maintaining students' focus and discipline, promoting self-directed learning, and monitoring student progress and attendance remotely might have posed difficulties.

Equity and access: The transition to online teaching may have exacerbated existing inequalities in educational opportunities. Participants may have encountered challenges related to students' varying access to technology and reliable internet connections, disparities in home learning environments, and the need to accommodate diverse student needs and circumstances.

Emotional and social well-being: The lack of in-person interactions and the isolation associated with online teaching may have impacted participants' emotional well-being. They may have experienced challenges in fostering a supportive online learning community, addressing students' emotional needs, and dealing with their own stress and burnout.

LIMITATIONS

A little research to confirm these conclusions as the data is related to Gujarat and not the country at large. The research has more futuristic approaches. As the sample selected is from 220 teachers limiting to actual 111 respondents, it cannot justify the impact of teaching efficacy due to covid-19 situation because a large number of population cannot be studied with this sample. Thus, this limitation explains the hurdles a researcher might face in concluding the investigation and fulfilling the objectives being more accurate. The upcoming research can be conducted with inclusion of more and varied variables. The future research can ensure a larger number of sample size in different states and country at large. Furthermore, expansion of the model can be done if the researcher includes the turnover rates, experience with the superiors, and work commitments.

CONCLUSION

On the basis of the results, Covid-19 has a significant impact on the teaching efficacy in schools of Gujarat. Hence, more schools must be trained properly to adapt to the current scenario. Innovation, team work and creativity must be encouraged so that it keeps the teachers and students motivated. The study would increase the awareness among-st different schools. The study would provide them with a clear holistic picture of their standing and the scope for the further improvement. The study would also help to get a clear idea about the impact of pandemic on the teacher performance and personal growth, if any. Hence, attention must be provided to this education sector to make teachers more motivated and oriented towards the ultimate school goals. The study has found teachers are capable of having profound personalities and pitching in with self-interest in such crisis. The study finds teachers who have been supported less experienced less growth in INNOVATIVE TOOLS AND TECHNIQUES.

REFERENCES

- Kang Ma1 & Muhammad Chutiyami1 & Yijin Zhang2 & Sandy Nicoll (2021). Online teaching self-efficacy during COVID-19: Changes, its associated factors and moderators.
- John Miltenburg (2018) Online Teaching in a Large, Required, Undergraduate Management Science Course. *INFORMS Transactions on Education*
- Arbuckle, J. L. (2017). Amos (Version 25.0). [Computer program]. Chicago, IL: IBM SPSS.
- Bailey, C. J., & Card, K. A. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *Internet and Higher Education*, 12(3–4), 152–155. <https://doi.org/10.1016/j.iheduc.2009.08.002>.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman & Company.
- Bandura, A. (2019). Applying theory for human betterment. *Perspectives on Psychological Science*, 14(1), 12–15. <https://doi.org/10.1177/1745691618815165>.
- Bao, W. (2020). COVID -19 and online teaching in higher education: A case study of Peking University. *Human Behaviour and Emerging Technologies*, 2(2), 113–115. <https://doi.org/10.1002/hbe2.191>.
- Besser, A., Lotem, S., & Zeigler-Hill, V. (2020). Psychological stress and vocal symptoms Among University professors in Israel: Implications of the shift to Online synchronous teaching during the COVID-19 pandemic. *Journal of Voice*. <https://doi.org/10.1016/j.jvoice.2020.05.028>.
- Braun, V, Clarke, V & Weate, P. (2016). Using thematic analysis in sport and exercise research. In A. C. Smith, B. Sparkes (Ed.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 191– 205). Routledge. <https://doi.org/10.4324/9781315762012.ch15>.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16(2), 239–253. [https://doi.org/10.1016/S0742-051X\(99\)00057-8](https://doi.org/10.1016/S0742-051X(99)00057-8).

- Cavanaugh, C., & DeWeese, A. (2020) Understanding the professional learning and support needs of educators during the initial weeks of pandemic school closures through search terms and content use.
- Collie, R. J., & Martin, A. J. (2017) *Journal of Technology and Teacher Education*, 28, 233–238. China Education Online. (2020) Nearly 60 million students returned to studying]. Retrieved August 25, 2020, from https://news.eol.cn/yaowen/202004/t20200427_1723806.shtml. Education and Information Technologies.
- Teachers' sense of adaptability: Examining links with perceived autonomy support, teachers' psychological functioning, and students' numeracy achievement. *Learning and Individual Differences*, 55, 29–39. <https://doi.org/10.1016/j.lindif.2017.03.003>.
- Collie, R. J., Granziera, H., & Martin, A. J. (2018). Teachers' perceived autonomy support and adaptability: An investigation employing the job demands-resources model as relevant to workplace exhaustion, disengagement, and commitment. *Teaching and Teacher Education*, 74, 125–136. <https://doi.org/10.1016/j.tate.2018.04.015>.
- Collie, R. J., Granziera, H., Martin, A. J., Burns, E. C., & Holliman, A. J. (2020). Adaptability among science teachers in schools: A multi-nation examination of its role in school outcomes. *Teaching and Teacher Education*, 95, 1–11. <https://doi.org/10.1016/j.tate.2020.103148>.
- Corry, M., & Stella, J. (2018) Teacher self-efficacy in online education: A review of the literature. *Research in Learning Technology*, 26(4), 1–12. <https://doi.org/10.25304/rlt.v26.2047>.
- Creswell, J., & Creswell, D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Czerniewicz, L., Trotter, H., & Haupt, G. (2019). Online teaching in response to student protests and campus shutdowns: Academics' perspectives. *International Journal of Educational Technology in Higher Education*, 16(1), 1–22. <https://doi.org/10.1186/s41239-019-0170-1>.
- Devica, S. (2015). Teacher perceptions of efficacy in the secondary virtual classroom: A phenomenological study. City University of Seattle.
- Dicke, T., Stebner, F., Linninger, C., Kunter, M., & Leutner, D. (2018). A longitudinal study of teachers' occupational well-being: Applying the job demands-resources model. *Journal of Occupational Health Psychology*, 23(2), 262–277. <https://doi.org/10.1037/ocp0000070>.
- DiPietro, M., Ferdig, R., Black, E., & Preston, M. (2008). Best practices in teaching K-12 online: Lessons learned from Michigan virtual school teachers. *Journal of Interactive Online Learning*, 7(1), 10–35.
- Euser, A. M., Zoccali, C., Jager, K. J., & Dekker, F. W. (2009) Cohort studies: Prospective versus retrospective. *Nephron. Clinical Practice*, 113(3), c214–c217. <https://doi.org/10.1159/000235241>.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications Ltd.
- Freudenberg, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice*, 12(1), 73–82. <https://doi.org/10.1037/h0086411>.
- Glackin, M., & Hohenstein, J. (2018). Teachers' self-efficacy: Progressing qualitative analysis. *International Journal of Research and Method in Education*, 41, 271–290. <https://doi.org/10.1080/1743727X.2017.1295940>.
- Granziera, H., & Perera, H. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Co-temporary Educational Psychology*, 58, 75–84. <https://doi.org/10.1016/j.cedpsych.2019.02.003>.