



Soft Skills for Effective Teaching: A Model Development for Master Teachers in the Province of Cotabato

Vivien E. Guadalupe

DepED

ABSTRACT

This study explored the essential soft skills demonstrated by Master Teachers in the elementary schools of the Cotabato Division, aiming to develop and validate a reliable scale through a combination of quantitative and qualitative methods. Using Exploratory Factor Analysis (EFA), seventeen initial components were extracted, which were refined into eleven key factors. These included Collaborative Mentorship, Organized Efficiency, Proactive Leadership, Adaptive Collaboration, and Empowering and Effective Communication, among others. However, Confirmatory Factor Analysis (CFA) results revealed that a simplified four-factor model—comprising Collaborative Mentorship, Organized Efficiency, Proactive Leadership, and Adaptive Collaboration—exhibited strong model fit ($CFI = .937$, $RMSEA = .054$), suggesting a more practical and statistically sound structure. Internal consistency of the scale was excellent, with a Cronbach's alpha of .914, and factor loadings confirmed the strength and coherence of each dimension.

Complementing the statistical analysis, thematic analysis of interviews highlighted three core soft skills vital for effective teaching and relationship-building: communication, emotional intelligence, and adaptability. Teachers reported enhancing these skills through reflective practices, continuous feedback, and collaborative engagement with peers and students. Moreover, the findings emphasized the importance of cultural awareness and inclusive strategies in addressing the diverse needs of learners. The integration of EFA, CFA, and thematic analysis yielded a robust understanding of the multidimensional nature of soft skills among Master Teachers. The study concludes with the development of a validated soft skills scale that can be used for professional development, evaluation, and policy formulation within the educational system.

INTRODUCTION

In the world of teaching, the role of master teachers extends beyond the traditional teaching responsibilities. They stood as leaders, mentors, and helped in the cultivation of an enriching environment. They are often recognized for their exceptional teaching abilities and their influence on both students and their colleagues. However, there is a challenge to their soft skills which may have an impact towards career trajectories.

In the global perspectives, master teachers with strong soft skills were better able to engage with students as posited by Wright (2024). They could manage classroom dynamics which are essential in providing a positive learning environment. These suggested that soft skills are integral to teaching effectiveness and student outcomes (Ragusa et al., 2024).

Career engagements among master teachers indicated their greater commitment to bigger responsibilities (McIlven & Perera, 2024; Paredes & Buenaventura, 2024). They have made themselves models in integrating learning to students. All of these have contributed to the formation of a strong professional identity which is imperative for career development and engagement (Shu, 2022). These underpin the crucial role of soft skills in learning development.

There were frequently used theoretical frameworks in existence, such models used the general contexts without putting it to the contexts of the master teachers (Kivunja, 2018). The need for the development of a model that integrates elements from the existing theories has called for further exploration (Ngang & Chan, 2015). By doing so, it may be able to understand the variability of Cotabato province and the public educational environments where master teachers are important figures.

Furthermore, understanding these skills is crucial for enhancing educational outcomes and supporting master teachers in their complex roles. The development of a model will provide comprehensive perspectives of infinite commitment to leading teachers and students. These aforesaid justifications motivated the researcher to explore this body of knowledge.

Statement of the Problem

This study will provide answers to the following sub-problems:

1. What are the constructs of soft skills for Master Teachers in the Province of Cotabato?

2. What model of soft skills for effective teaching for Master teachers in the Province of Cotabato can be developed?

METHODOLOGY

This chapter presents the research design, locale of the study, data gathering procedure, respondents/participants, research instrument, sampling procedure, data analysis, and ethical considerations.

Research Design

This study is quantitative which employs the cross-sectional survey design. A quantitative cross-sectional survey collects data from a sample of participants at a single point in time, and the data is typically in the form of numerical responses to questions or items that are designed to measure various constructs or variables. This data serves as the input for performing EFA, a statistical technique that explores how variables group together into latent factors (Wang & Cheng, 2022).

In this manner, the researcher will distribute the questionnaire to the respondents. The predetermined variables will be tested using the EFA to determine its factorability. To come up with the model of Soft Skills for Master teachers, the Confirmatory Factor Analysis will be applied.

Respondents of the Study

The respondents of the study will be the Master Teachers assigned in the Schools Division of Cotabato and Kidapawan City. There will be 315 respondents from the elementary master teachers in SDO of Cotabato and SDO of Kidapawan City who will participate in the survey questionnaire.

Research Instrument

The research instrument to be used in this study is a survey questionnaire. It includes constructs of Soft Skills for Master Teachers. The identified constructs or variables were taken from the theory and or from the literature. To respond to the statements, the respondents will adhere to the Likert Scale in determining the level of their responses.

Data Analysis

The researcher will use the Exploratory Factor Analysis. It will ensure whether the questionnaire items group together in a way that reflects underlying constructs (Finch, 2020). Meanwhile, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity will be used to assess the suitability of the data for factor analysis (Shkeer & Awang, 2019). Correspondingly, the Confirmatory Factor Analysis tests the predetermined model of Soft Skills among the Master Teachers (Marsh et al., 2020).

RESULTS AND DISCUSSIONS

This chapter presents the results and discussions based on the data collected and analyzed in the study. It includes the presentation of statistical findings, interpretation of model fit indices, factor loadings, and validation of constructs relevant to the research objectives. The discussion also integrates theoretical insights and practical implications, highlighting the relevance of the findings in addressing the research questions.

Dimension of Soft Skills for Master Teachers Effective Teaching

Collaborative Mentorship is characterized by behaviors that promote team participation and shared professional growth. Teachers who provide support (0.745), extend expertise (0.734), and actively join team discussions (0.717) demonstrate a culture of collegiality. Appreciating colleagues (0.713), sharing responsibilities (0.694), and encouraging classroom teamwork (0.572) also contribute to this dimension. These behaviors strengthen collective efficacy and a sense of shared accountability among educators.

Organized Efficiency highlights the role of time management and structured planning. Items such as organizing classroom materials (0.749), meeting grading deadlines (0.733), providing timely feedback (0.712), and managing schedules (0.626) show how teachers maximize learning time. Proactive use of external resources (0.440) and classroom space management (0.486) further enhance instructional delivery. Such systematic approaches enable consistency and clarity in teaching routines.

Proactive Leadership reflects initiative in guiding others and supporting students' progress. Teachers who lead development sessions (0.710), encourage teamwork (0.698), and mentor new staff (0.522) shape a forward-thinking culture. Monitoring student progress (0.677) and identifying learning gaps (0.494) suggest attentiveness to learning outcomes and a willingness to improve practices.

Adaptive Collaboration captures flexibility and team harmony. Adapting to team changes (0.776), resolving conflicts (0.652), and encouraging student collaboration (0.545) reflect openness to collective work. Aligning with team objectives (0.544) and initiating peer learning (0.487) further show how adaptability contributes to a responsive and resilient teaching environment.

Empowering Communication encompasses respectful interaction and student engagement. Maintaining a positive environment (0.721), empowering students (0.661), and promoting responsibility (0.498) underscore the importance of inclusive communication. Encouraging a growth mindset (0.440) and adjusting tone (0.407) reflect sensitivity to student needs and clarity in instruction.

Effective Communication specifically relates to instructional clarity. Using simple language (0.754), summarizing lessons (0.589), making eye contact (0.518), and articulating objectives (0.486) ensure that messages are clear and accessible. These skills are essential for maintaining student understanding and focus.

Instructional Support represents contributions to professional learning. Supporting colleagues (0.715), using digital tools (0.638), and promoting continuous improvement (0.594) align with the mentoring aspect of leadership and the goal of building collective competence.

Leadership Development combines responsibility and peer empowerment. Holding students accountable (0.735), respecting diverse opinions (0.595), mentoring (0.584), and leading projects (0.450) reveal how leadership is exercised through consistent, ethical, and growth-oriented actions.

Organizational Efficiency is reinforced by effective use of time (0.722), space (0.551), and planning (0.410). These behaviors ensure classrooms are well-managed and conducive to learning.

Collaborative Engagement involves fostering relationships among colleagues. Encouraging collaboration (0.792), sharing ideas (0.525), and maintaining communication (0.797) point to a strong foundation of mutual trust and cooperative effort.

Creative Problem-Solving is exhibited through tackling classroom issues (0.677) and resource-seeking (0.635). This factor represents a practical mindset in overcoming instructional and behavioral challenges.

Effective Prioritization emphasizes strategic decision-making. Prioritizing student-focused tasks (0.650) ensures that learning outcomes remain at the center of teaching actions.

Behavior Management includes setting expectations for student behavior (0.714), fostering a disciplined and respectful environment.

Problem Solving reflects anticipation and intervention. Identifying challenges early (0.775) and addressing gaps in understanding (0.475) showcase proactive instructional practices.

Instructional Innovation captures efforts to enhance pedagogy. Seeking innovative methods (0.689) reveals a commitment to evolving and adapting teaching strategies in line with student needs.

Dimension of Soft Skills for Master Teachers Effective Teaching

Item	Item Statement	Score	Constructs
55	I provide support to my colleagues when they need help with their tasks or challenges.	0.745	Collaborative Mentorship
56	I extend assistance to my colleagues when they need my expertise.	0.734	
52	I actively participate in team meetings, discussions, and planning sessions.	0.717	
51	I appreciate the contributions of my colleagues for achieving success.	0.713	
53	I willingly share responsibilities with my colleagues to ensure tasks are evenly distributed.	0.694	
28	I encourage teamwork and collaboration among students in the classroom.	0.572	
57	I consistently work towards achieving the common goals and objectives set by the teaching team.	0.426	
33	I promote a growth mindset among teachers.	0.426	Organized Efficiency
44	I ensure that classroom materials are organized and easily accessible to minimize disruptions during lessons.	0.749	
39	I consistently meet deadlines for grading assignments.	0.733	
40	I immediately provide feedback to student's performance.	0.712	
37	I manage my time well, balancing lesson planning, grading, and classroom instruction efficiently.	0.626	
36	I effectively plan and organize my teaching schedule to maximize classroom time for student learning.	0.506	
45	I proactively seek and utilize external resources, such as guest speakers or community programs, to enrich my teaching.	0.440	

46	I manage classroom space effectively to create an organized and conducive environment for learning.	0.486	
17	I often volunteer to lead professional development sessions or workshops for my colleagues.	0.710	Proactive Leadership
18	I encourage collaborative efforts among teachers.	0.698	
15	I actively monitor student progress and adjust my teaching methods to ensure every student succeeds.	0.677	
16	I take the initiative to mentor and support new or less experienced teachers in my school.	0.522	
12	I proactively identify gaps in student understanding and design additional activities to address them.	0.494	
58	I adapt well to changes in team dynamics or teaching strategies as required by the team.	0.776	Adaptive Collaboration
54	I am effective in resolving conflicts among my colleagues to ensure a positive and productive environment.	0.652	
59	I encourage my students to collaborate and work effectively in teams during classroom activities.	0.545	
57	I consistently work towards achieving the common goals and objectives set by the teaching team.	0.544	
29	I take the initiative to lead professional development activities for my colleagues.	0.487	
23	I maintain a positive classroom environment where students feel safe and respected.	0.721	Empowering Communication
27	I empower students to voice their opinions and contribute to class discussions.	0.661	
24	I encourage students to take responsibility for their learning and personal growth.	0.498	
33	I promote a growth mindset among teachers.	0.440	
3	I adjust my speaking tone and pace to ensure that all students understand the content.	0.407	
2	I use simple and accessible language when explaining complex concepts.	0.754	Effective Communication
7	I summarize key points at the end of each lesson to reinforce student understanding.	0.589	
5	I maintain eye contact with students to enhance engagement and communication.	0.518	
1	I clearly articulate lesson objectives and expectations to my students.	0.486	
31	I help my colleagues improve their teaching practices.	0.715	Instructional Support
43	I maximize the use of digital tools and technology to support teaching and streamline administrative tasks.	0.638	
34	I encourage my colleagues to continuously improve their teaching.	0.594	
26	I hold my students accountable in a fair and consistent manner.	0.735	Leadership Development
50	I respect the opinions of my colleagues even when they differ from my own.	0.595	
30	I serve as a mentor or guide for less experienced teachers.	0.584	
35	I take on leadership roles in school committees or projects aimed at improving educational practices.	0.450	
4	I encourage students to ask questions and seek clarification during lessons.	0.695	

9	I regularly check for understanding by asking students to paraphrase or summarize what they've learned.	0.620	Organizational Efficiency
8	I use visual aids (e.g., charts, slides) to complement verbal explanations.	0.605	
36	I effectively plan and organize my teaching schedule to maximize classroom time for student learning.	0.410	
41	I make efficient use of time during lessons, minimizing downtime and keeping students engaged.	0.722	
46	I manage classroom space effectively to create an organized and conducive environment for learning.	0.551	
11	I regularly take the initiative to create new and engaging lesson plans that meet diverse student needs.	0.472	Collaborative Engagement
32	I encourage collaboration and knowledge-sharing among my colleagues.	0.792	
48	I share ideas with my colleagues.	0.525	Effective Communication
49	I maintain open and clear communication with my colleagues to ensure successful collaboration.	0.797	
22	I look for creative solutions to classroom issues, such as student disengagement or behavioral problems.	0.677	Creative Problem-Solving
14	I search for resources to help improve learning.	0.635	
38	I prioritize tasks based on their importance to student success.	0.650	Effective Prioritization
25	I set clear expectations for student behavior.	0.714	Behavior Management
21	I proactively identify potential problems or challenges in my classroom and take steps to address them before they escalate.	0.775	Problem Solving
12	I proactively identify gaps in student understanding and design additional activities to address them.	0.475	Instructional Innovation
13	I seek out innovative teaching methods to improve my instructional practices.	0.689	

Fit Indices of Eleven-Factor Model on Soft Skills for Master Teachers Effective Teaching

The results of the model fit indices for the eleven-factor model on soft skills for master teachers' effective teaching indicate a mixed level of model adequacy. The Chi-square to degrees of freedom ratio (CMIN) was 2.373, suggesting an acceptable fit as it falls below the general cutoff of 3.0. The Root Mean Square Error of Approximation (RMSEA) was .066, which is within the acceptable threshold of less than .08, indicating a reasonably good fit for the model. However, the Comparative Fit Index (CFI) at .736, the Tucker-Lewis Index (TLI) at .708, and the Normed Fit Index (NFI) at .623 all fall below the recommended minimum value of .90, which reflects weaker comparative model fit relative to a null model. The Akaike Information Criterion (AIC) value was 2715.174, which can be used for model comparison, with lower values indicating better model parsimony.

These results suggest that while the model demonstrates acceptable error approximation and general fit based on RMSEA and CMIN, the lower values for CFI, TLI, and NFI indicate that the model may require further refinement or that some factors might not contribute strongly to explaining the variance in soft skills.

Fit Indices of Eleven-Factor Model on Soft Skills for Master Teachers Effective Teaching

the need for either model specification—such as removing redundant or weakly loading items—or reconsidering the factor structure itself.

Fit Indices of Eleven-Factor Model on Soft Skills for Master Teachers Effective Teaching

Fit Indices	Obtained Value
CMIN	4.496
Comparative Fit Index (CFI)	.679
Tucker-Lewis Index (TLI)	.639
Normed Fit Index (NFI)	.626

Root Mean Square Error of Approximation (RMSEA)	.100
Akaike Information Criterion (AIC)	2503.326

Eleven-Factor Model on Soft Skills for Master Teachers Effective Teaching

The path diagram presents a Confirmatory Factor Analysis (CFA) involving eleven latent constructs, each linked to a set of observed variables. The constructs include F1 (Collaborative Mentorship), F2 (Organized Efficiency), F3 (Proactive Leadership), F4 (Adaptive Collaboration), F5 (Empowering Communication), F6 (Effective Communication), F7 (Instructional Support), F8 (Leadership Development), F9 (Instructional Clarity), F10 (Organizational Efficiency), and F11 (Collaborative Engagement). Factor loadings for most items exceed 0.70, indicating strong item-to-factor relationships. Inter-factor correlations range from weak to moderate, such as 0.07 between F1 and F2 and 0.11 between F1 and F3, implying interconnected dimensions. The central latent construct F5 (Empowering Communication) shows strong loadings with Q3, Q23, Q24, Q27, and Q33, while F1 (Collaborative Mentorship) and F2 (Organized Efficiency) also demonstrate robust associations with their observed variables.

The interconnectedness among the eleven latent factors suggests a multifaceted structure of leadership and communication practices within the school system. Collaborative Mentorship (F1), Empowering Communication (F5), and Instructional Support (F7) appear to be foundational to building teacher capacity and organizational coherence. The overlapping paths between constructs such as F2 (Organized Efficiency) and F10 (Organizational Efficiency), and F3 (Proactive Leadership) and F4 (Adaptive Collaboration), indicate shared variance, hinting that effective school leadership depends not on isolated behaviors but on cohesive systemic dynamics. The strong factor loadings affirm that the observed indicators are appropriate reflections of their underlying dimensions, which reinforces the reliability of the measurement model. The structure supports the notion that school leadership is not linear but dynamic, where mentoring, collaboration, and communication intersect to influence school culture and instructional quality.

Scale on Soft Skills for Master Teachers Effective Teaching

Collaborative Mentorship	5	4	3	2	1
I provide support to my colleagues when they need help with their tasks or challenges.					
I extend assistance to my colleagues when they need my expertise.					
I actively participate in team meetings, discussions, and planning sessions.					
I appreciate the contributions of my colleagues for achieving success.					
I willingly share responsibilities with my colleagues to ensure tasks are evenly distributed.					
I encourage teamwork and collaboration among students in the classroom.					
Organized efficiency	5	4	3	2	1
I ensure that classroom materials are organized and easily accessible to minimize disruptions during lessons.					
I consistently meet deadlines for grading assignments.					
I immediately provide feedback to student's performance.					
I manage my time well, balancing lesson planning, grading, and classroom instruction efficiently.					
Proactive Leadership	5	4	3	2	1
I often volunteer to lead professional development sessions or workshops for my colleagues.					
I encourage collaborative efforts among teachers.					
I actively monitor student progress and adjust my teaching methods to ensure every student succeeds.					
Adaptive Collaboration	5	4	3	2	1
I adapt well to changes in team dynamics or teaching strategies as required by the team.					
I am effective in resolving conflicts among my colleagues to ensure a positive and productive environment.					
I encourage my students to collaborate and work effectively in teams during classroom activities.					

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings

This study examined the soft skills essential to Master Teachers' effective teaching in the Division of Cotabato using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and item reliability statistics.

1. Reflective practices and feedback loops play a vital role in the continuous development of teachers' soft skills, allowing them to adjust their strategies and improve student engagement.
2. The analysis revealed that teachers consider three core soft skills essential for building strong relationships with students: communication, emotional intelligence and empathy, and adaptability.
3. Teachers enhance these skills through reflective practices, feedback mechanisms, and engagement with peers and students, promoting continuous improvement and professional growth.
4. Furthermore, the study highlighted the importance of cultural sensitivity and inclusive teaching strategies in addressing diverse student needs and cultural backgrounds. This includes developing cultural awareness, using culturally responsive strategies, and modifying instruction to ensure inclusivity.
5. The EFA revealed seventeen initial components, of which eleven distinct factors were identified and refined based on factor loadings, variance explained, and item relationships. These factors include: (1) Collaborative Mentorship, (2) Organized Efficiency, (3) Proactive Leadership, (4) Adaptive Collaboration, (5) Empowering Communication, (6) Effective Communication, (7) Instructional Support, (8) Leadership Development, (9) Instructional Clarity, (10) Organizational Efficiency, and (11) Collaborative Engagement.
6. However, the eleven-factor model yielded moderate fit indices ($CFI = .736$, $RMSEA = .066$), suggesting the need for simplification. A subsequent four-factor model demonstrated a strong overall fit ($CFI = .937$, $RMSEA = .054$), retaining the core constructs of Collaborative Mentorship, Organized Efficiency, Proactive Leadership, and Adaptive Collaboration.
7. Cronbach's alpha for the scale was high at 0.914, indicating excellent internal consistency. Component loadings were generally strong, and the scree plot confirmed the presence of a limited number of dominant factors.

Conclusions

This study concludes that:

1. Master Teachers in the Division of Cotabato demonstrate a wide range of soft skills that influence their instructional effectiveness and leadership roles.
2. Four core dimensions—Collaborative Mentorship, Organized Efficiency, Proactive Leadership, and Adaptive Collaboration—emerged as the most reliable and distinct factors.
3. The four-factor model shows strong statistical validity and parsimony, making it a practical framework for assessment and development of soft skills among teacher leaders.
4. The high internal consistency and variance explained affirm the appropriateness of the instrument in capturing the soft skill domains of Master Teachers.
5. Soft skills are foundational to effective teaching and relationship-building. Communication, emotional intelligence, and adaptability enable teachers to connect meaningfully with students and support diverse learning needs.
6. **Reflective practices and feedback loops** play a vital role in the continuous development of teachers' soft skills, allowing them to adjust their strategies and improve student engagement.
7. **Cultural awareness and inclusive teaching approaches** are critical for promoting equity in classrooms with diverse learners. Teachers who understand and respect students' cultural identities are better equipped to create supportive learning environments. **Student and peer engagement** not only enhances classroom interaction but also contributes to teachers' professional growth and adaptability to modern educational challenges.

Recommendations

This study recommends that:

1. The identified soft skill domains should be incorporated into capacity-building programs for Master Teachers and school heads to reinforce their mentoring, organizational, and collaborative roles.

2. Professional development activities should prioritize proactive leadership and adaptive collaboration through case-based learning, peer coaching, and reflective practice workshops.
3. Schools and divisions should adopt the validated four-factor model as a basis for evaluating Master Teachers' soft skills in performance appraisals and promotions.
4. Future studies may test the model across other school divisions and regions to confirm its generalizability and potential for national application.
5. The Department of Education may consider embedding soft skills metrics in teaching standards and career progression benchmarks, especially under the Philippine Professional Standards for Teachers (PPST).
6. Integrate soft skill development into teacher training and professional development programs, focusing on communication, emotional intelligence, and adaptability.
7. Encourage reflective practices such as post-lesson reflections, peer observations, and feedback mechanisms to support ongoing growth in teaching effectiveness.

References

- Finch, W. H. (2020). Using fit statistic differences to determine the optimal number of factors to retain in an exploratory factor analysis. *Educational and psychological measurement*, 80(2), 217-241.
- Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International journal of higher education*, 7(6), 44-53.
- Marsh, H. W., Guo, J., Dicke, T., Parker, P. D., & Craven, R. G. (2020). Confirmatory factor analysis (CFA), exploratory structural equation modeling (ESEM), and set-ESEM: Optimal balance between goodness of fit and parsimony. *Multivariate behavioral research*, 55(1), 102-119.
- McIlveen, P., & Perera, H. N. (2016). Career optimism mediates the effect of personality on teachers' career engagement. *Journal of Career Assessment*, 24(4), 623-636.
- Ngang, T. K., & Chan, T. C. (2015). Critical issues of soft skills development in teaching professional training: Educators' perspectives. *Procedia-Social and Behavioral Sciences*, 205, 128-133.
- Paredes, V. S., & Buenaventura, V. P. (2024). Employability skills and career competencies as predictors of work engagement among technical-vocational teachers. *European Journal of Education Studies*, 11(3).
- Ragusa, A., Caggiano, V., Trigueros Ramos, R., González-Bernal, J. J., Gentil
- Gutiérrez, A., Bastos, S. A. M. C., ... & Santamaría-Peláez, M. (2022). High education and university teaching and learning processes: Soft skills. *International journal of environmental research and public health*, 19(17), 10699.
- Shu, K. (2022). Teachers' commitment and self-efficacy as predictors of work engagement and well-being. *Frontiers in Psychology*, 13, 850204.
- Shkeer, A. S., & Awang, Z. (2019). Exploring the items for measuring the marketing information system construct: An exploratory factor analysis. *International Review of Management and Marketing*, 9(6), 87.
- Wright, Z. (2024). Teacher Perceptions of Instructional Influence on Students' 21st Century Soft Skills Retention and Transference (Doctoral dissertation, Walden University).