ENHANCING STUDENT ENGAGEMENT AND TEACHING EFFECTIVENESS THROUGH THE 7CS FRAMEWORKAT INTERNATIONAL SCHOOLS: A CASE STUDY EXPLORATION FOR USE IN TERTIARY INSTITUTION

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Abstract

In the evolving landscape of higher education, student-centered learning is increasingly recognized as essential for enhancing engagement, satisfaction, and academic success. This paper explores the implementation of the "7Cs" framework—Clarity, Challenge, Control, Care, Confer, Captivate, and Consolidate—at university Collaborative International School. By shifting the focus from traditional teacher evaluations to a model emphasizing students' perceptions of their learning experiences, we aim to improve teaching quality and educational outcomes. The paper discusses the successes and challenges encountered during the adoption of this framework, alongside future considerations for integrating student feedback into institutionalpractices. By prioritizing student voices in assessing teaching effectiveness, it is propose that tertiary institutions can foster a more responsive and dynamic learning environment that meets the needs of 21st-century learners.

Introduction

In modern educational contexts, student-centered learning has increasingly emerged as a fundamental approach to improving student engagement and academic performance. Traditional methods of assessing teaching effectiveness often prioritize teacher perceptions or administrative evaluations, neglecting the critical role of student feedback in driving instructional quality. This paper presents an in-depth case study conducted at University College Fairview Collaborative International School, which has implemented the 7Cs framework as a tool to enhance the qualityof teaching and learning. By focusing on students' perceptions of their educational experiences, this framework offers a transformative approach to assessing and improving instructional practices.

The study aims to answer a central question: *Whose perceptions of the teaching and learning process are most important—the teacher's, the observer's, or the learner's?* The research underscores that student voices should take precedence, as their experiences directly influence their

learning outcomes. In this context, it is argued that shifting towards student-centered feedback models can revolutionize educational environments and lead to higher levels of studentachievement, satisfaction, and engagement.

The 7Cs Framework

The Tripod 7Cs surveys and framework, created by Dr. Ronald F. Ferguson of Harvard University in 2001, provide educators with valuable insights and actionable feedback. These

tools help teachers better understand their practices, set clear goals, and confidently direct their efforts toward improving educational outcomes.The seven components—Clarity, Challenge, Control, Care, Confer, Captivate, and Consolidate—represent key dimensions of effective teaching, particularly in fostering student engagement and academic achievement.

1. **Clarity** involves teachers making learning objectives, instructions, and content comprehensible for students.
2. **Challenge** focuses on pushing students to reach higher academic standards by promoting effort and persistence.
3. **Control** is about maintaining classroom management that fosters a productive andrespectful learning environment.
4. **Care** reflects the teacher's genuine concern for students' well-being and academicsuccess.
5. **Confer** emphasizes the importance of engaging students in dialogue, making them feelheard, and encouraging their contributions.
6. **Captivate** seeks to sustain students' interest by making learning compelling and relevant.
7. **Consolidate** involves reinforcing learning through reflection and review, helpingstudents consolidate their knowledge.

Research Background

The 7Cs framework has been widely studied and has proven effective in diverse educational contexts. Ferguson et al. (2015) found that higher scores on the 7Cs survey correlated with improved student achievement, engagement, and motivation. Similarly, other research (Kane et al., 2013; Stuit et al., 2013) has demonstrated the strong predictive validity of student perceptionsin measuring instructional quality. These studies highlight the potential for using student feedback not only to evaluate teaching effectiveness but also to guide ongoing professional development for educators.

Methodology

The case study was conducted at 5 Collaborative International School, here in Malaysia an IB accredited institution, over the course of one quarter. The study involved 99 teachers and 608 students across various year in the middle year programme (age 11 years till 15 years old).A mixed-methods approach was employed, combining quantitative survey data from the 7Cs framework with qualitative interviews and focus group discussions to capture the perspectives ofboth students and teachers.

Quantitative Data Collection:

The 7Cs survey was administered to students at the end of each semester. This survey included questions designed to evaluate the seven core dimensions of effective teaching. The results were analyzed to identify correlations between high 7Cs scores and improved student performance and satisfaction.

Qualitative Data Collection:

Interviews with teachers and focus group discussions with students provided insights into the practical challenges and successes of implementing the 7Cs framework. These qualitative components offered a more understanding of how the framework impacted teaching strategiesand classroom dynamics.

Findings

Successes of the 7Cs Implementation

1. Enhanced Student Engagement

Students reported increased engagement, particularly in classes where the components of Clarityand Captivate were emphasized. Teachers who made learning objectives transparent and connected classroom content to real-world scenarios were found to create more meaningful learning experiences for students.

2. Improved Teacher-Student Relationships

The emphasis on Care and Confer within the 7Cs framework encouraged teachers to develop stronger, more supportive relationships with their students. Many students noted that feeling heard and cared for contributed significantly to their academic motivation.

3. Relationship between the 7Cs teaching framework scores and academic growth

Figure 1 with table 1 and 2 below provide information on subject-specific academic growth**,** correlation between 7Cs scores and growth**,** and overall statistical analysis**.**

The analysis reveals a moderate but positive relationship between the 7Cs teaching framework and academic growth across the subjects in the MYP. While the **7Cs scores** reflect student satisfaction and teaching effectiveness, their direct impact on academic growth is somewhat limited, as indicated by the relatively low $\mathbf{R^2}$ value. This suggests that while the **7C framework**is a useful tool for understanding teaching dynamics, academic growth is also influenced by other factors, possibly including student motivation, curriculum difficulty, and external learningsupports.

Teachers and administrators can use these insights to continue refining their instructional approaches based on 7C feedback while also considering additional strategies to improve student academic outcomes.

Table1: Subject-Specific Academic Growth and Corresponding 7Cs Scores in MYP

Subject	Q2 Fnl Avg	Q3 Fnl Avg	Growth	7c Score
EN	5	5	0.1	4.1
EB	5	5	0.0	2.4
BM	5	5	0.2	4.0
MN	4	5	0.1	4.0
IS	5	5	0.1	4.1
BI	5	5	0.0	4.5
CH	5	5	0.0	4.4
PH	5	5	0.1	4.5
MA	5	5	0.1	4.2
AM	5	6	0.2	4.5
DE	5	5	0.0	4.0
PE	5	5	0.1	4.2
VA	5	5	0.1	4.1
SC	5	5	0.1	4.3
MU	5	5	0.0	3.7

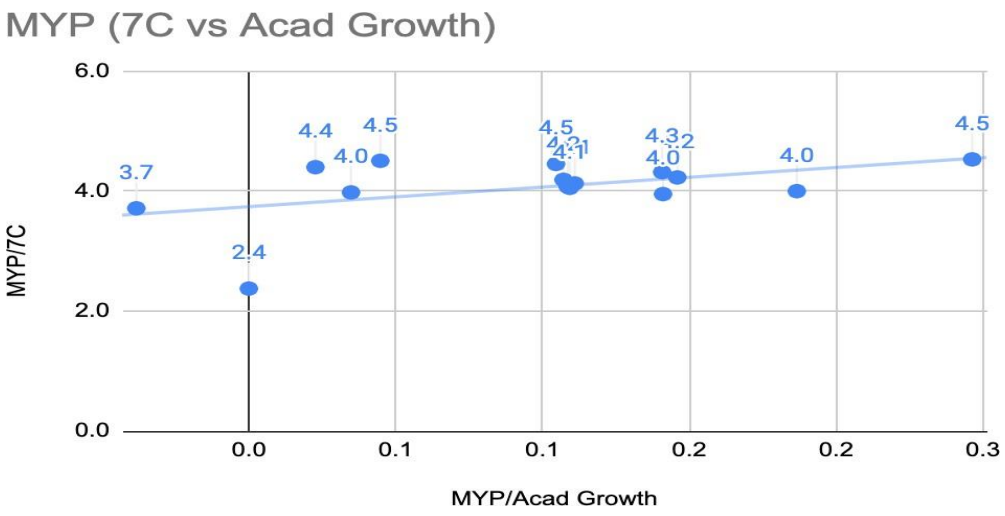

Figure 1: Correlation between 7Cs Framework Scores and Academic Growth in MYP Subjects

Table 2: Statistical Summary of Regression Analysis: Relationship Between 7Cs Scores and Academic Growth

Slope	0.7
Standard Error(Slope)	0.04
Coeffient of Determination	0.22
F Statistic	3.60
Regression Sum of the Square	0.02
Intercept	-0.17
Standard Error(Intercept)	0.14
Standard Error(y Estimation)	0.07
Degree of Freedom	13.00
Residual Sum of the Square	0.06

1. Subject-Specific Academic Growth and 7C Scores

In the dataset, each subject is represented by the final average scores for Q2 and Q3, the academic growth between these quarters, and the corresponding 7C score. The subjects include English (EN), Malay (BM), Mathematics (MA), and various science and humanities courses (e.g., Biology, Chemistry, Physics, History).

- **Growth per Subject**:
  - Most subjects demonstrate very modest academic growth (ranging from **0.0 to 0.2**). For example, **English (EN)** showed a growth of **0.1**, while **Malay (BM)** exhibited growth of **0.2**.
  - Notably, **Art & Music (AM)** registered the highest academic growth with **0.2**, while **English B (EB)**, **Biology (BI)**, and **Chemistry (CH)** showed no academic growth (**0.0**).
- **7C Scores**:
  - The **7C scores** range from **2.4** (English B) to **4.5** (Biology, Physics, Art & Music).
  - Subjects with high **7C scores** such as **Physics (4.5)** and **Biology (4.5)** do not show significant academic growth despite strong 7C feedback.
  - The subject **Music (MU)** had the lowest **7C score** of **3.7**, which could suggest lower engagement or satisfaction from students in that area.

2. Correlation between 7C Scores and Academic Growth

Positive Relationship:

- A slight positive correlation exists between **7C scores** and **academic growth**, as suggested by the **slope value** of **0.07**. This means that for every unit increase in the 7C score, there is an associated growth of 0.07 in academic performance. However, this growth is modest, indicating that while higher 7C scores might correlate with better academic outcomes, the impact is small.

Coefficient of Determination (R^2):

- The **R^2 value of 0.22** suggests that about **22% of the variation** in academic growth can be explained by the variation in 7C scores. This is a moderate relationship, indicating that other factors besides the 7Cs framework might beinfluencing academic growth.

F Statistic:

- The **F-statistic of 3.60** with a p-value less than **0.05** suggests that the relationship between 7C scores and academic growth is statistically significant, though not strongly so. It implies that 7C feedback can provide valuable insights into academic performance trends, but it is not the sole determining factor.

3. Statistical Summary and Key Findings

Slope and Intercept:

- The slope of **0.07** represents a small positive increase in academic growth withrespect to 7C scores.
- The intercept of **-0.17** suggests that without considering 7C scores, there might bea negative starting point for academic growth.

Residuals:

- The **residual sum of squares (0.06)** and the **standard error of y estimation (0.07)** indicate that while there are some unexplained variations in the data, the model does capture a portion of the relationship between 7C scores and academicgrowth.

Challenges Faced During Implementation

1. Resistance to Change

A significant challenge was the initial resistance from some faculty members. Teachers accustomed to traditional methods of assessment were hesitant to adopt a student-centeredfeedback system. This resistance required ongoing professional development to address misconceptions and emphasize the value of the 7Cs model.

2. Balancing Care and Control
While teachers embraced the importance of Care, some struggled to balance this with maintaining Control in the classroom. Some teachers feared that being too lenient would undermine their authority, while others found it difficult to maintain a structured learningenvironment.

3. Logistical and Time Constraints
Implementing the 7Cs framework required additional time for reflection, professional development, and adapting lesson plans. For some teachers, these added responsibilities were difficult to manage alongside their regular teaching duties.

Discussion

The implementation of the 7Cs framework at Collaborative International School underscores the importance of aligning teaching strategies with student perceptions of learning. By focusing on the dimensions that matter most to students—such as Clarity, Captivate, and Care—educators can create more engaging and supportive learning environments. However, the challenges faced during implementation highlight the need for ongoing professional development and institutionalsupport.

Future Considerations and Recommendations for Tertiary Institutions

1. Institutional Integration of the 7Cs Framework Tertiary institutions should aim to embedthe 7Cs framework deeply into their educational practices. This could be achieved by:

- Incorporating the 7Cs dimensions into regular teaching evaluations.
- Integrating the framework into teacher development programs.
- Designing curriculum guidelines that emphasize elements like Clarity, Challenge, and Captivate in teaching strategies.

The long-term goal is to make the 7Cs part of the institutional culture, guiding how educators teach and interact with students across disciplines. Regular feedback loops between students andfaculty will help to fine-tune the teaching-learning process.

2. Ongoing Professional Development Effective use of the 7Cs framework requires that educators receive ongoing professional development, ensuring they understand how to apply these principles in diverse classroom settings. Workshops, coaching, and peer-review mechanisms can support teachers in aligning their practices with the framework. In particular,professional development should focus on:

- **Classroom management strategies** to balance Care and Control.
- **Creating captivating lessons** that sustain student engagement.
- **Consolidating learning**, including methods for effective review and reflection.

3. Use of Technology to Streamline Feedback Tertiary institutions should leverage technologyto facilitate the continuous gathering and analysis of student feedback related to the 7Cs. Learning management systems (LMS) and student response platforms could be used to gather real-time feedback on teaching practices, helping educators adjust their strategies promptly.

4. **Tailoring the 7Cs Framework to Diverse Learning Contexts** While the 7Cs framework is robust, tertiary institutions should adapt its use based on specific disciplines and student demographics. For example:

- **STEM fields** may emphasize Clarity and Challenge more, ensuring that complexconcepts are taught with precision and rigor.
- **Humanities and social sciences** may place greater focus on Care, Confer, and Captivate,fostering deeper critical thinking and discussions.

In addition, the framework should be tailored for use in diverse cultural and educational contexts, ensuring that it remains inclusive and effective for students from various backgrounds.

5. **Institutional Policies and Leadership Commitment** Leadership buy-in is critical for the successful adoption of the 7Cs framework. Tertiary institutions should develop policies that:

    - Include student feedback as a key component in faculty performance appraisals.
    - Encourage departments to set specific goals aligned with the 7Cs framework.
    - Provide incentives, such as awards or professional advancement opportunities, for faculty who effectively implement student-centered practices.

Implications for Theory

1. **Student-Centered Learning Theory** The implementation of the 7Cs framework reinforces student-centered learning theory, which emphasizes that education should prioritize the needs, interests, and feedback of students. By focusing on student perceptions, the framework aligns with constructivist principles where learners actively construct knowledge through engagement and interaction with their environment.

The adoption of the 7Cs provides further empirical support for theories suggesting that effective teaching goes beyond content delivery. Instead, it involves creating a learning environment where students are actively involved in setting learning objectives, reflecting on their progress, and receiving meaningful support and challenges.

2. **Constructivist and Sociocultural Learning Theories** Constructivist theory, particularly the work of Vygotsky, emphasizes the role of social interaction and feedback in learning. The 7Cs framework, particularly its focus on Confer (dialogue) and Care, aligns with Vygotsky's ideas of guided learning and the importance of teacher-student relationships. When students are engaged in meaningful dialogue with their instructors, they can co-construct knowledge, thereby enhancing deeper learning and critical thinking.

3. **Reflective Practice** Schön's theory of reflective practice suggests that effective educators must engage in ongoing reflection on their teaching methods. The 7Cs framework facilitates this by offering structured feedback from students, enabling educators to reflect on their teaching and adjust accordingly. The framework, therefore, bridges the gap between theory and practice, as educators use real-time data to enhance their teaching.

Implications for Practice

1. **Shift in Evaluation Models** The 7Cs framework promotes a significant shift in evaluation models

within tertiary institutions, from predominantly teacher-focused evaluations to a more balanced approach that includes student perceptions as a central element. This practice encourages a reflective, adaptive approach to teaching, where feedback becomes an ongoing cycle of improvement rather than a one-time assessment.

1. Enhancing Pedagogical Practices The practical application of the 7Cs can lead to notable improvements in pedagogical practices:

- Clarity and Captivate: Teachers may use more visual aids, real-world examples, and storytelling techniques to make lessons clearer and more engaging.
- Consolidate: Teachers can integrate frequent formative assessments, peer reviews, and reflective discussions to reinforce student learning.

These enhanced practices help make the teaching and learning process more interactive, dynamic, and aligned with student needs.

2. Faculty-Student Relations The emphasis on Care and Confer within the 7Cs framework fosters stronger relationships between faculty and students, contributing to a more supportive academic environment. When students feel cared for and heard, they are more likely to engage with the material, persist through challenges, and achieve better academic outcomes.

3. Scaffolding and Differentiation The 7Cs framework's focus on Challenge and Control supports the use of scaffolding and differentiated instruction. Teachers can design lessons that push students to stretch their abilities while providing necessary support. In practice, this means:

- Offering multiple entry points for students based on their prior knowledge and learning styles.
- Differentiating tasks and assessments to meet the diverse needs of learners in tertiary settings.

Conclusion

The 7Cs framework represents a promising model for improving teaching effectiveness and student engagement in tertiary institutions. By prioritizing student-centered learning, it enhances both pedagogical practices and teacher-student relationships, creating a more dynamic and responsive educational environment.

For tertiary institutions to realize the full potential of the 7Cs framework, they must commit to integrating it into their policies, professional development programs, and evaluation systems. By doing so, they will not only improve educational outcomes but also contribute to a more inclusive, engaging, and reflective learning environment.

In theory, the 7Cs framework aligns with student-centered learning, constructivism, and reflective practice. In practice, it offers tangible strategies to enhance engagement, academic achievement, and the overall educational experience for students in higher education.

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