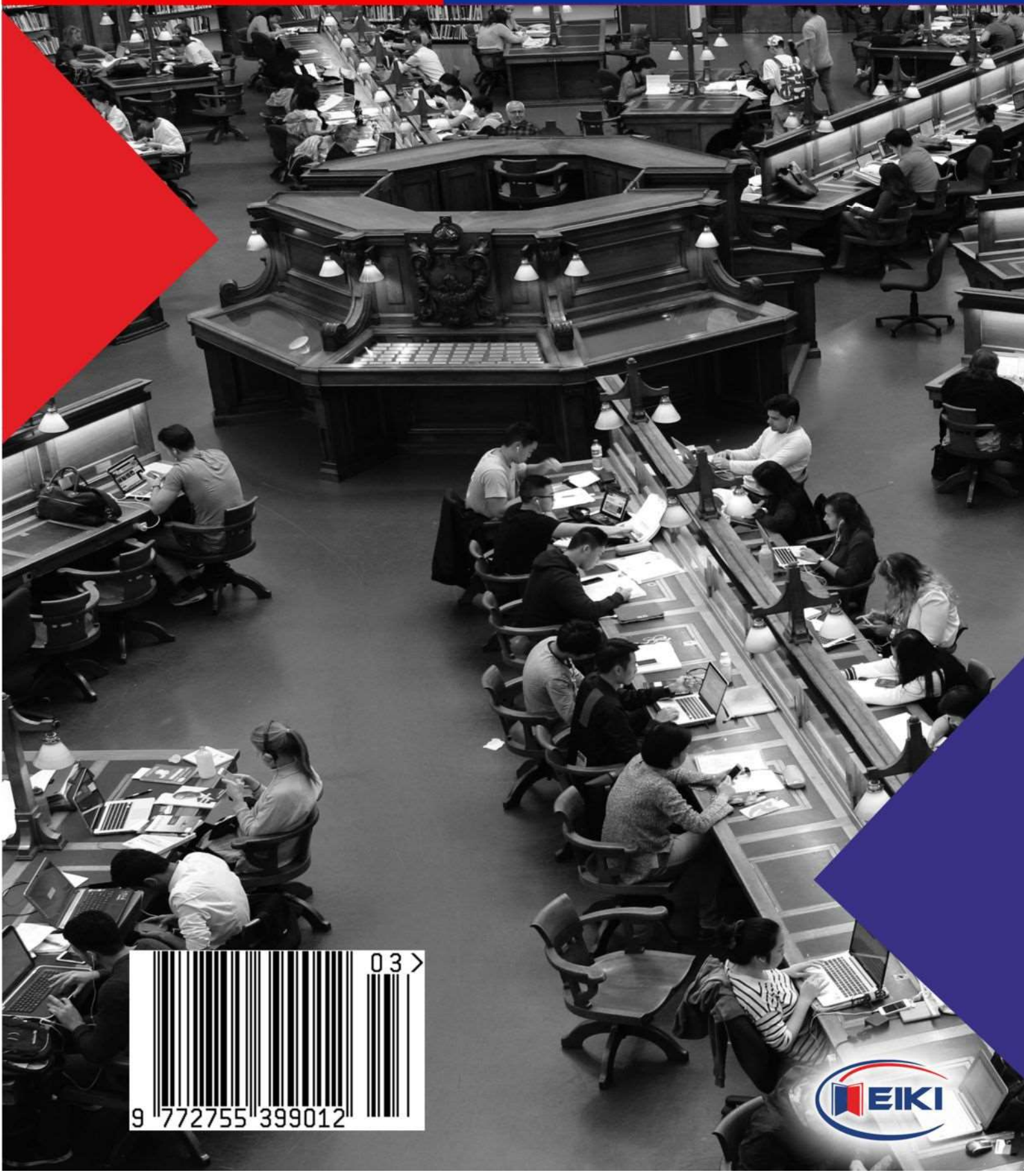


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Forewords

Dear reader,

It is a great pleasure for us to present the Autumn issue of Journal of Effective Teaching Methods (JETM). The issue contains high quality articles about current problems in pedagogical science. We congratulate all the authors, editors and reviewers, who contributed in successfully completing the third issue of 2023, and look forward to receiving more of your research for consideration in future issues.

We paid the great attention to provide our readers with relevant research in education as a dynamic and evolving scientific paradigm helps shape teaching and learning practices, optimize learning environment, and enhance efficiency of educational process.

The present issue presents a compilation of articles that explore the educational technologies, differentiated instruction, project-based learning and contextualized strategies in particular, social studies practice in high school and culturally responsive teaching. Also, the journal includes relevant research topics about creating inclusive educational environment, evolution of educational methodologies, some aspects of online education and professional communication training. We hope that the findings presented by our authors will contribute to the innovation development, and, therefore, the educational process is improved through introduction of new ideas, methods, technologies, and approaches.

On behalf of the European Institute of Knowledge and Innovation, I want to express my deepest and most sincere gratitude to each member of the Editorial team for your unwavering commitment, dedication, and hard work in our shared pursuit of excellence in the field of education.

Your tireless efforts have not only enriched our issue but have also brought together diverse perspectives, cultures, and talents from around the world. It is this global collaboration that makes our Editorial team truly exceptional, and I am deeply grateful for the privilege of working alongside such a remarkable group of individuals.

Also, I thank to our authors for your dedication to advancing knowledge and sharing your expertise. Your research, insights, and scholarly work have consistently pushed the boundaries of knowledge in pedagogical science. We appreciate the collaborative spirit you bring to the academic world. Your willingness to engage in peer review, share your knowledge with fellow researchers, and foster scholarly discussions has a profound and lasting impact on the research community. Your contributions are integral to the success of our journal, and we are deeply honored to have had the privilege of publishing your work. We look forward to continuing our partnership and providing a platform for you to share your research with a global audience.

Once again, we extend our heartfelt gratitude to you for your exceptional contributions to Journal of Effective Teaching Methods.

Warm regards,

Nataliya Bhinder, Editor-in-Chief

Doctor of Pedagogical Sciences, Professor

Original research article

The Use of Differentiated Instruction in LSP Courses in Moroccan Higher Education

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Abstract: Differentiated instruction is an umbrella term that covers a wide range of instructional strategies addressing diverse learners' needs. Equally, LSP pedagogy is predicated on the identification and acknowledgement of learners' needs. Both approaches incorporate pedagogical practices derived from the principles of learner-centred teaching. The integration of differentiated instruction practices into LSP pedagogy can potentially result in more effective learning and learner satisfaction. This study sought to survey LSP instructors' views and perceptions about the use of differentiated instruction in higher education. Data was collected using a questionnaire with closed-ended questions. Participants included twenty LSP instructors teaching English and French at a large polytechnic university in Morocco. The majority of the participants placed a high value on the use of differentiated instruction in LSP courses. A number of implementation barriers were identified. Although differentiated instruction is considered to be an effective instructional approach, institutional constraints may hinder its potential benefits.

Keywords: differentiated instruction, pedagogy, LSP, higher education, learner-centeredness, needs analysis

1. Introduction

Research-based practices enhance teaching and learning effectiveness. Tomlinson and McTighe (2006) urged educators to “look for practices grounded in scholarship”. They maintained that “our profession, like all other professions, strengthens as we engage in the cycle of examining practice, developing theory, and systematically investigating both theory and practice” (p. 173). In reference to primary and secondary education, Tomlinson (2017) noted that teaching and learning have been more unitary than differentiated. High-quality instruction is deemed to be one of the most important ingredients contributing to learner achievement. “High-quality teaching entails providing students with prompt, informative feedback and is directed by analyses of achievement results often leading to the provision of differentiated instruction” (Leithwood et al., 2017). In tertiary education, instruction is arguably not optimally designed to foster effective learning strategies. University instructors still draw heavily upon traditional practices (Pilner & Johnson, 2004). This by no means implies that the instructional approach is the only culprit. Several factors are at play in determining the success or failure of university students. Some of these factors are listed below.

1. Academic skills (Mull, Skitlington, & Alper, 2001)
2. Self-regulatory strategies (Hofer & Pintrich, 1997; Pintrich & Schunk, 2002; Ruban & Reis, 2006)
3. Difficulties in areas such as reading, writing, mathematics, memory, time management, and organization affect learner achievement (Allsopp, Minskiff, & Bolt, 2005; Reis, Neu & McGuire, 1997; Wirt et al., 2004)
4. Level of engagement is affected by students' previous education experiences (Kuh, 2007)
5. Instructors' beliefs about the process of a student-centered, learning-oriented epistemology promote learning teaching and learning. A teacher-centered, transmission-

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oriented epistemology inhibits learning (Kember, 2001; Norton et al., 2005; Samuellowicz & Bain, 2001; Trigwell, Prosser & Waterhouse, 1999)

6. Interactive and collaborative activities that are aligned with students' interests, beliefs and backgrounds promote efficacy (Putnam & Burko, 2000).

Differentiated instruction has been proposed as a viable alternative to the dominant teaching-based model currently in use in many universities across the globe (Santangelo & Tomlinson, 2009). "While differentiated learning is emphasized in K-12 classrooms, less attention is given to differentiation at the university level." (Hartshorne et al., 2012). Guided by research in cognitive psychology (Rock, Gregg, Ellis, & Gable, 2008), differentiated learning was initially designed to accommodate the needs of students in special and gifted education (Lawrence-Brown, 2004; McClesky & Waldron, 1998). Differentiated instruction is a multidisciplinary construct and its exponents "draw on a wide research of theories and research to provide validation" (Wood & Blanton, 2012, p. 148).

Second language acquisition (SLA) has been extensively researched and yielded insightful findings. One of the fundamental goals of SLA research is to facilitate and expedite the SLA process, and appropriate instruction will undeniably make a contribution (Freeman-Larsen & Long, 2016). There is little research examining the effects of differentiated instruction practices on instructed SLA. This may be the case because differentiated instruction is regarded as "a way of thinking about teaching and learning that can be translated into classroom practices in many ways" (Blaz, 2016, p.5).

Since the early 1960s, language for specific purposes (LSP) has become one of the most important areas of teaching in universities around the world. It began as a peripheralized mode of instruction that emphasized the teaching of specialized vocabulary to students in vocational schools. Today, "LSP plays a critical role globally, evidenced by the massive growth of higher education institutions offering English-medium instruction" (Raitskaya, 2018, p.1). Given the nature of LSP, it seems evident that the integration of differentiated instruction practices into LSP courses would lead to better learning outcomes.

In an independent survey commissioned by the British Council, 1200 respondents ranging in age from 15 to 25 expressed their approval and enthusiasm for the Moroccan government's decision to shift to English as the primary foreign language both in secondary and higher education. (British Council Morocco, n.d.). As English has acquired a higher social and educational status, the need for sound pedagogical practices cannot be overestimated. The present study aims to fill a gap in the extant literature in the area of LSP pedagogy by examining LSP instructors' perceptions of the use of differentiated instruction in LSP courses. Four research questions guided this study:

1. How do LSP instructors in higher education define differentiated instruction?
2. How often do language instructors use instructional strategies?
3. To what extent is differentiated instruction relevant in LSP programs?
4. What are the benefits and challenges in planning and implementing differentiated instruction?

2. Materials and Methods

The questions used in the questionnaire were developed based on the work of Turner, Solis and Kinade, (2017). To answer the questions, the participants had to choose one or more answers from a list of four answers (see Appendix A). The study targeted language instructors teaching English and French (dominant languages in Morocco) in tertiary education. The questionnaire included four sections: demographic information (age, gender, teaching experience, language of instruction), types of taught LSP courses and eight multiple-choice questions. The purpose of the study was also included at the top of the survey. The survey questions were designed to elicit information for exploring the research questions.

Quantitative data were collected by means of an online survey created through Google Forms. Convenience sampling was used to collect specific information about the target population. The survey was emailed to twenty-five participants working as language instructors at Mohamed VI Polytechnic University. UM6P is a Moroccan non-profit private research university. The survey response rate was very high (80%).

The participants included 18 males (90%) and 2 females (10%). Fifteen taught English, and four taught French. The age of the participants range from 35 to 55 years old (see Table 1). Over Three-quarters of the participants have more than fifteen years of teaching

experience (see Table 2). Language for academic and general purposes top the list of the LSP courses taught by the participants. Language for business and engineering are also frequently taught courses (see Table 3).

Table 1. Research Questions (RQ) and Perception Survey Questions (Q)

Research questions	Topical concept	Survey questions
RQ1	Definitional angle	Q5
RQ2	Use of differentiated instructional strategies in LSP contexts	Q6 Q8
RQ3	Relevance of differentiated instruction in LSP contexts	Q7 Q9 Q10
RQ4	Benefits and challenges of using differentiated instruction in LSP	Q11 Q12

Table 2. Participants' Definition of Differentiated Instruction (n= 20)

	Definitional angle	Number of endorsements	Percentage of Endorsements
Benjamin, 2002	Instructional method	6	30%
Tomlinson, 2001	Planning	6	30%
Chapman & King, 2003	Philosophy	7	35%
Walpole & McKenna	Assessment	1	5%

Table 3. Frequency of use of Instructional Strategies in LSP Programs (n=20)

Response	n	Percentage
I do not use differentiated practices	1	5%
I use differentiated practices sporadically	8	40%
I use differentiated practices on a regular basis.	11	55%

3. Results

One-third of the participants chose the definition proposed by Benjamin (2002), which describes differentiated instruction as an instructional method. The other third selected Tomlinson's (2001) definition, which stresses the importance of planning. The definition put forward by Chapman and King (2013) was chosen by the 35% of the participants. Only one participant opted for assessment as a key defining feature of differentiated instruction (see table 2).

Over half of the participants reported they use differentiated practices on a regular basis and two-fifths use differentiated practices sporadically. Only one participant never uses differentiated practices (see table 3).

With regard to the importance of this instructional model, 55% of the participants regard using differentiated instruction as extremely important. 40% of the participants see differentiated practices as somewhat important (see table 4).

The majority of the participants were familiar with differentiated instruction. 60% through workshops and conferences, 25% read some literature, and 15% received no training whatsoever (See table 5). The overwhelming majority of participants view differentiated instruction as both practical and reasonable (see table 7). A little over three-quarters of the participants regarded differentiated instruction as significant and worthy of the effort required to implement (see table 7). Over half of the participants believed that class size and lack of training present a challenge to the implementation of differentiated instruction. Less than a third of the participants viewed the lack of resources as another challenge. A quarter of the participants attribute the challenge of implementation to a lack of instructional time (see table 8).

Table 4. Opinion about using differentiated instruction in LSP programs (n=20)

Response	n	Percentage
Not effective	1	5%
Somewhat important	8	40%
Extremely important	11	55%

Table 5. Type of training in differentiated instruction (n=20)

Response	n	Percentage
none	3	13%
Read some literature	5	25%
Attended a workshop and/or conference	7	35%
Attended several workshops and/or conference	5	25%

Table 6. Relevance of differentiated instruction in LSP programs (n=20)

Response	n	Percentage
Impractical but reasonable	1	5%
Practical but unreasonable	1	5%
Practical and reasonable	18	90%

Table 7. Benefits of using differentiated instruction in LSP courses

Response	n	Percentage
Insignificant but somewhat worthy of the effort	1	5%
Significant but not worthy of the effort	3	15%
Significant and worthy of the effort	16	80%

Table 8. Challenges of implementation (n=20)

Response	n	Percentage
Class size	12	60%
Lack of instructional time	5	25%
Lack of resources	7	35%
Lack of training	12	60%

4. Discussion

4.1. Definition of differentiation instruction

Instructors participating in the study have different perspectives about the essential elements of differentiated instruction. 30% of the participants identified differentiation as an instructional method. 30% emphasized planning in the differentiation process. 35% conceptualized differentiated instruction as a philosophy. It is apparent that the participants have different perspectives about what constitutes differentiated instruction.

Grouping of students is based on individual strengths and needs determined by teacher-administered assessments. Assessment is the starting point of the differentiation process. It is worth noting that only one participant identified assessment as an essential element in differentiated instruction. The participants' differing views of differentiated instruction is reflected in the extant literature. This definitional variation or disparity "can potentially lead to lack of clarity in both research and practice" (Wood & Blanton, 2012). Wood and Blanton (2012) attributed this conceptual imprecision to "how individual differences are categorized and what is necessary for differentiation to occur" (p.146). Wood and Blanton (2012) proposed a definition that merged the key concepts from the field: "Differentiated instruction is a concept that embodies both a philosophy of addressing individual needs of students in heterogeneous classrooms and the instructional approaches embedded within and supportive of that philosophy" (p. 146).

4.2. Frequency and effectiveness of strategy use in LSP programs

Over 50% of the instructors participating in this study reported they used differentiated strategies on a regular basis. Two-fifths reported they used differentiated strategies sporadically. The high frequency of strategy use can be explained by the instructor's beliefs about the effectiveness of the instructional model. Over 90% of the participants recognized the importance of differentiated instruction in their classroom practices. Tomlinson et al. (2003) noted that for differentiated instruction to occur, "teachers may need to change both "beliefs about the nature of schooling and their resulting classroom practice" (p. 177).

The high percentages in favor of differentiated practices may also be attributed to the nature of the content area. Language instruction is a dynamic research area, and many

publications tackled issues related to teaching approaches and methods. In addition, the instructors' long experience teaching a variety of courses, as well as their involvement in academic projects, may have familiarized them with different types of teaching approaches. Surprisingly, Instructors teaching other disciplines tend to “depend primarily on one pedagogy” (Turner, Solis, & Kincade, 2017, p. 495).

4.3. *Relevance of differentiated instruction in LSP contexts*

There is a general consensus on the practicality of differentiated instruction in LSP courses. 90% of the instructors in this study believed that differentiated instruction is both practical and reasonable. The reported relevance of differentiated instruction in LSP courses may be explained by the nature of the student population enrolled in LSP courses. Language courses in postsecondary education are populated by students from a variety of disciplines and with differing levels of proficiency. It would make sense to adopt a pedagogy that advocates instructional strategies that respond to the individual needs of students. Moreover, the theoretical underpinnings of differentiated instruction are in line with the principles of LSP teaching. For example, in differentiated instruction, pre-assessment tasks are used to identify students' readiness level. LSP instructors use placement tests and needs analysis instruments to develop courses that would match students' differing communicative needs.

4.5. *Benefits and challenges of implementing differentiated instruction in LSP courses*

80% of the participants reported they find differentiated instruction as significant and worthy of the effort. Santangelo and Tomlinson (2009) conceded that “effective differentiation requires a significant amount of time, effort and dedication on the part of the instructor (p. 320). The majority of the instructors in this study seemed willing to do the additional work required to implement this instructional model in LSP courses.

60% of the participants reported the successful execution of differentiated instruction in LSP courses can be thwarted by class size and lack of training. Additional obstacles include “content coverage demands, lack of planning time and funding, grading policies, and resistance to changing current practices” (Wood & Blanton, 2012, p. 152). For example, it can be time-consuming for instructors to design and deliver instruction that is tailored to the needs of groups of students. In addition, instructors may need to provide additional resources and support to help students who are struggling to keep up with the pace of the course.

6. Conclusions

“There have been numerous studies conducted that show that even after receiving a great deal of training on differentiated instruction, most teachers are still not putting it into practice in the classroom.” (O'Meara, 2010, p. 2). In addition, empirical data supporting the effectiveness of differentiated instruction is, however, lacking. Tomlinson et al. (2003) warned that more work needs to be done to quantify the benefits of differentiated instruction on student outcomes. Although the results of the present study cannot be generalizable given the small size of the sample, key findings suggest the following:

- a. Differentiated instruction is a common practice in LSP courses
- b. LSP instructors have positive opinions about differentiated instruction
- c. LSP instructors already use differentiated strategies despite the perceived challenges and
- d. Differentiated instruction is congruent with the principles of LSP pedagogy.

Further research is needed to identify the types of instructional practices employed by LSP instructors and measure their effects on the development of communicative competence.

6. Patents

Institutional Review Board Statement: In this section, kindly add the Institutional Review Board Statement and approval number, if applicable, to the study. One can exclude this part if not applicable or if the study did not require ethical approval or other kinds of approval. If approval is required, provide complete details, including the institution's name, protocol number, and date of approval.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Conflicts of Interest: The authors declare no conflict of interest.

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Appendix A. Questionnaire conducted among the participants of the survey

The Use of Differentiated Instruction in LSP Courses

1. Age

- a) 25 - 35
- b) 35 - 45
- c) 45 - 55
- d) 55- 65

2. Gender

- a) Female
- b) Male

3. Years of Teaching Experience

- a) 5 - 10
- b) 10 - 15
- c) 15 - 20
- d) 20 - 30

4. Language you teach

- a) French
- b) English

5. Which LSP course/s do you regularly teach?

- a) Academic purposes
- b) General purposes
- c) Medical purposes
- d) Engineering
- e) Business
- f) 6. Science and technology
- g) Other:

7. Which definition best captures the essence of differentiated instruction?

- a) Differentiated instruction refers to a variety of classroom practices that allow for differences in students' learning styles, interests, prior knowledge, socialization needs, and comfort zones
- b) In a differentiated classroom, the teacher proactively plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs
- c) Differentiated instruction is philosophy that enables teachers to plan strategically in order to reach the needs of diverse learners in the classroom today
- d) Differentiated instruction is both driven and monitored by assessment

8. How would you describe your use of differentiated instruction?

- a. I do not use differentiated practices.
- b. I use differentiated practices sporadically.
- c. I use differentiated practices on a regular basis.

9. Which type of training in differentiated instruction have you received?

- a. None.
- b. Read some literature.
- c. Attended a workshop and/or conference presentation.
- d. Attended several workshops and/or conference presentations.

10. How often do you engage in direct whole-class instruction?

- a. Seldom (under 10%).
- b. Frequently (10% - 40%).
- c. Often (40% - 60%).
- d. Always (60% or more).

11. How would you describe your personal opinion about using differentiated instruction in LSP courses?

- a. Not effective



- b. A buzzword that will fade.
- c. Somewhat important.
- d. Extremely important.

12. How would you describe the practicality of using differentiated instruction in LSP courses?

- a. Impractical and unreasonable.
- b. Impractical but reasonable.
- c. Practical but unreasonable.
- d. Practical and reasonable.

13. How would you describe the benefits of using differentiated instruction in LSP courses?

- a. Insignificant and not worthy of the effort required to implement.
- b. Insignificant but somewhat worthy of the effort required to implement
- c. Significant but not worthy of the effort required to implement
- d. Significant and worthy of the effort required to implement.

14. Which of the following makes differentiated instruction in LSP courses challenging to implement (select more than one answer if applicable?)

- a. Lack of training.
- b. Lack of resources.
- c. Lack of instructional time.
- d. Class size
- e. Other:

Original research article

Examination of Special Education Teachers' Opinions on the Problems They Experience and the Solution of the Problems

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Abstract: In this study, the problems experienced by special education teachers according to their opinions, the source of the problems and their expectations were tried to be revealed. The research, which was conducted to identify the problems and expectations of special education teachers who work in the country and have an important place, is aimed to improve the quality of special education by developing solution proposals. Eight school administrators, who work in schools of various types and levels in Aydın province, who were determined by criterion sampling and maximum diversity sampling, which are among the purposeful sampling methods, participated in this study, which is considered in the case study design, which is one of the qualitative research methods. The semi-structured interview form used in the research was shaped by the researchers as a result of the literature review. The data obtained by the face-to-face interview method were analyzed by content analysis. As a result of the analysis of the data, it was determined that special education teachers mostly experienced problems with school management, teaching process, student parents, physical space and other field teachers. In this study, which is thought to make a significant contribution to increasing the quality of special education given in schools, within the framework of the data obtained, meeting the needs of teaching materials and equipment, providing seminars, courses and distance education services for parents, teachers and school administrators, and communication and communication of school administrators with other field teachers. Suggestions have been developed to carry out activities to increase interaction.

Keywords: special education, school administrator, teacher

1. Introduction

Education, given by determined people in a controlled environment, provides personal development and socialization, and is the most important phenomenon in the development of contemporary and civilization. Through education, the cultural heritage, knowledge and experience of societies are regularly transferred from generation to generation (Öztürk, 2001). At the same time, education is an important tool in eliminating inequality between individuals and providing equality of opportunity, as well as enabling individuals to realize their abilities and develop their personality (Adem, 1997). It is also stated in the Universal Declaration of Human Rights that every individual has the right to education. In this direction, legal, administrative and educational arrangements have been tried to be made for the students who do not show normal development and who have special education needs to benefit from equal education opportunities. Special education can be called as activities and practices that include the education and training of individuals who are separated from their peers in terms of body, social development, spirit and mind, and it is the regulation of educational variables in order to eliminate the deficiencies in the communication, academic and adaptation areas of individuals (Özsoy, Özyürek, & Eripek, 2000). In other words, special education can be expressed as all of the educational services that differ significantly from other students, increase the individual's ability to live independently and aim to increase individual capacity (Altınkurt, 2008). There are many students who have deficiencies in different fields and need special education.

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Individuals with special needs are separated from other classmates due to at least one characteristic. They may exhibit different performances in terms of mental characteristics, they may not have sensory problems or the skills that their peers have, and they may experience communicative problems in their relationships (Özyürek, 2008). According to the data of the Turkish Statistical Institute (TÜİK), 12.29% of the individuals that make up the society have special needs (TÜİK, 2020). It is necessary to organize and implement different training programs for these individuals, who show a different development from their peers due to the difference in their different physical, mental and social developments that occur at birth or that occur later, and cannot be trained with a similar education (Kızır & Memişoğlu, 2017). The first target in the education of individuals in need of special education; to provide individuals with disabilities in different areas with independent living skills, to strengthen their ties to life and to facilitate their adaptation to social life (Çoşkun, Dündar, & Parlak, 2014; Tursun, 2019). For this purpose, special education practices differ considerably from formal and non-formal education in terms of method, content and organization of educational environments. The organization and development of educational practices and the ability to provide special education services to the desired extent are closely related to the teacher. It is extremely important for the teacher to know the characteristics and needs of the children, to create and implement an effective plan, to follow the developments in the field, to support and cooperate with the management in increasing the quality of education.

However, special education teachers may encounter different problems in the education and training process. There are domestic and foreign studies in the literature on the problems faced by special education teachers (Brownell & Smith, 1992; Çetin, 2004; Demir & Mustafa, 2009; Emery & Vandenberg, 2010; Kilgore et al., 2003; Kodal, 2006; Kılıç, 2020; Saygın & Hamurcu, 2010; Stempien & Loeb, 2002).

In this sense, it is important to plan the special education services effectively and to reveal the current situation in order to improve their quality. In this study, it is aimed to determine the sources of problems experienced by special education teachers and to examine the solutions to these problems according to the views of the teachers. In this direction, answers to the following questions were sought:

1. What are the problems special education teachers have with school management?
2. What are the problems experienced by special education teachers regarding the teaching process?
3. What are the problems that special education teachers have with their parents?
4. What are the problems experienced by special education teachers regarding physical space?
5. What are the problems that special education teachers have with other field teachers?
6. What are the solutions for the problems experienced by special education teachers?

2. Methods and materials

2.1. Research pattern

In this study, in which case study was preferred among the qualitative research designs, it was aimed to obtain data in the direction of teacher experiences by referring to the opinions of teachers about the problems faced by special education teachers. Case studies are an empirical research method that can be preferred in cases where current cases are studied in their own living spaces, the boundaries between the case and the content are not clear, and it is possible to gather information through multiple sources (Yıldırım & Şimşek, 2006).

A case study reveals results related to a certain situation by investigating one or more cases in depth. The factors related to a situation are investigated in a holistic way, focusing on how they affect the relevant situation and how they are affected, and the results of a situation set an example for understanding similar situations (Yıldırım & Şimşek, 2006).

In case studies that focus on dynamic and multifaceted connections between human relations, events and other external factors (Cohen, Manion, & Morrison, 2008), it is possible to gain deep insights into participants' perspectives when multiple data sources are used (Tellis, 1997). In this study, it has been determined as a case study, since it is a matter of examining and examining a situation in its real environment in detail (Creswell, 2021).

2.2. Working group

Purposive sampling method was preferred in this study, which aims to reveal the opinions of special education teachers about the problems they experience. With this method, it is aimed to examine information-rich situations in depth (Patton, 2018). In the study,

maximum variation and criterion sampling methods were used among the purposive sampling methods. While maximum diversity sampling is preferred in identifying and defining themes containing some differences and variations (Merriam, 2019); With the criterion sampling method, it is aimed to determine certain criteria and the people, events and situations that meet these criteria (Baltacı, 2018; Büyüköztürk, 2012).

The study group of the research consists of 10 teachers who voluntarily participated in the research working in Aydın in the 2022-2023 academic year. In order to ensure maximum diversity, teachers working in different schools were included in the research. The selection of the participants was made on a voluntary basis, and the criteria of being a special education teacher at the undergraduate level, having different gender and seniority, and having taught for at least 5 years were taken into consideration in the selection of the participants.

Table 1. Participant Characteristics

Code Name	Gender	Type of School	Employed Seniority	Educational Status
(K1)	Female	Kindergarden	6 years	Undergraduate
(K2)	Female	Primary School	8 years	Undergraduate
(K3)	Female	Primary School	10 years	Undergraduate
(K4)	Male	Secondary School	12 years	Undergraduate
(K5)	Male	Secondary School	10 years	Undergraduate
(K6)	Male	High School	14 years	Undergraduate
(K8)	Male	Secondary School	7 years	Undergraduate
(K9)	Male	Secondary School	10 years	Undergraduate
(K10)	Male	High School	12 years	Undergraduate

2.3. Data Collection Tools

In the study, the semi-structured interview form created by the researchers was used as a data collection tool. Semi-structured interviews are not as rigid as structured interviews and not as flexible as unstructured interviews, and data is tried to be obtained within the framework of the questions determined before they are conducted (Karasar, 1999). Thanks to the data obtained through interviews, people's experiences, opinions and thoughts on the subject, and attitudes are revealed (Baltacı, 2019).

A pilot study was carried out by taking expert opinion on the research questions prepared by conducting literature research, and the interview questions were revised and finalized.

The Opinions of Teachers to Identify the Problems Special Education Teachers Experienced interview form consists of 10 questions together with the probe questions. Some of the questions in the Interview form of Teachers' Opinions on Identifying the Problems Experienced by Special Education Teachers used in the study are as follows:

1. What does special education mean to you? Can you explain?
2. How can the applications used in special education processes be made more effective?

2.4. Data Collection and Analysis

The data used in the study were collected by the researchers in the 2022-2023 academic year. The data obtained as a result of face-to-face interviews with the participants, which lasted approximately 45 minutes, were transferred to Excel and made ready for analysis. Content analysis was preferred in the analysis of the data, and themes and categories were created. The opinions of three faculty members who are experts in the field of educational sciences were sought, and as a result of the analysis of the data obtained as a result of the interview, 5 themes and 14 categories were determined. The categories created were expressed as tables and the opinions of the participants were presented in the form of quotations.

The use of qualitative research in special education has an important place in determining the opinions and thoughts of the people involved in this process (Brantlinger et al., 2005).

It is important to determine the problems encountered in special education from different perspectives of personal views, to understand the problems more accurately and to develop solution proposals. The data obtained from the 10 participants were evaluated according to the content analysis and the problems and suggestions that the teachers encountered at the educational, institutional and family level were included.

2.5. Credibility, Transferability, Consistency and Confirmability of Research

In order to ensure validity in qualitative research, long-term participation and observation of the researcher, member control, rich description and diversification; In order to ensure reliability, the strategies of the researcher to express himself, his place and position clearly and to define the qualifications of the participants are applied (Creswell, 2021; Yıldırım & Şimşek, 2021).

In this direction, multiple data sources such as individual interviews, document analysis and observation were used to ensure internal validity and consistency in this study, and detailed descriptions were made by obtaining confirmation of the data obtained from the participants. In addition, every stage of the study was explained in detail, expert opinion was sought at many points, data analyzes were made and interpreted separately, the quality of the study was tried to be increased, and due care was taken to be unbiased, consistent and objective.

2.6. The Role of Researchers

Before moving on to qualitative research, the position of the researcher, attitudes, tendencies, experiences, opinions or prejudices that are likely to affect the research are expressed (Creswell, 2021). While one of the researchers involved in this study is an experienced and expert lecturer who has supervised many projects and thesis, the other researcher is a teacher and doctoral student. The fact that the study is carried out under the control of an experienced instructor contributes to the increase in the quality of the study.

3. Results

In this part of the study, the findings and comments obtained from the research are included. Comments with similar expressions and problems were grouped together.

Table 2. Problems faced by Special Education Teachers

Themes	Categories	f
School Management	Management indifference	7
	Manager inexperience	
	Staff shortage	
Teaching Process	Lack of material	6
	Lack of material support	
	Curriculum	
Parent behavior	High expectation from teacher	6
	Parent's disapproval	
	economic interest	
Physical Space	Hardware Insufficient	5
	Space limitation	
Other teacher behavior	Colleagues' lack of understanding	4
	Not wanting to teach these students	
	Non-interaction	
Total		28

When the answers of the participants were analyzed, it was determined that special education teachers had problems in five different categories: school management, teaching process, physical space, parents and other teacher behaviors. It is seen that special education teachers mostly encounter problems related to school management, teaching process and parent behavior. These problems are followed by problems related to physical space and the behavior of other teachers.

3.1. Problems with School Management

When the answers of the special education teachers are examined, the problems related to the school management are in the first place. Special education teachers, especially the school administration, do not have knowledge and experience in this field, they ignore the problems, their needs are either not met at all or are constantly postponed, they experience more problems especially in schools that receive education with other school levels because the school administration's students at other levels and their needs are met. stated that they care more. Regarding this, one participant stated that *"The administration does not know what special education is, does not understand but does not want to understand it, there is this unit in the school, but they are detached from everything else (K7)"*, while another said, *"Our deficiencies are not remedied,*

although we express our deficiencies, the administration is constantly saying "What is it? While another said, "The administration behaves very passively, we see us and our students as third class citizens, we are constantly ignored (K1)". In addition, they stated that the school administration exhibited passive behaviors regarding the student shuttles and this situation negatively affected them and increased the burden on them. Regarding this, one participant said, "The school administration needs to have a little dominance over the bus, there is no auxiliary staff, even loading and unloading is looking at us (K2)", while the other participant said, "The ones who run the bus, the bus drivers don't even know how to behave towards the children, anyway, for different reasons. Because of this, it changes frequently (K3)" while another said, "Support staff may be required in the classrooms, in some cases we call the parents when they are not available. The administration is not satisfied with this situation, but it is said in different ways (K4)". Another participant stated that "People who will be appointed as administrators in special education schools should either graduate from these schools or receive in-service training on this subject (K8)".

3.2. Problems with the Teaching Process

When the answers of the participants are examined, the problems they experience in the teaching process come second among the problems they voiced. Chief among these is the problem of lack of curriculum and materials. Almost all of the participants stated that they had problems especially about the lack of materials. Regarding this, one participant said, "The lack of material is a serious problem, I buy it myself and do it myself, I have no other choice (K2)", while another participant said, "There is a little material that I can use in the classroom, but it is not at all suitable for the level of the student and the incoming It is not suitable for some students (K5)", while another said, "The curriculum they want us to apply is not suitable for the structure of the child, there are such students that it is not even possible to apply it, the curriculum should be made suitable for individuals or grouped differently (K6)". On the other hand, they stated that "Student level is very insufficient, there is no printer even if we want to take a print out to give to the student (K4)".

Another participant said, "Our students are treated as normal students, celebration programs are sent for certain days and weeks, that is, it is not possible to get them done, to be able to keep them there and "When I come home from school, I try to design materials for students (K3)" he stated.

3.3. Problems with Student Parents

When the answers of the participants to the problems they encounter with the parents of the students are examined, it is seen that the parents generally do not have any idea about their children's ailments or conditions, and some of them do not accept and do not want to accept it, they have great expectations

from the teacher, but when they return home, the old behaviors are continued instead of the implementation of the things they want to be implemented. They stated that they always come to school by making excuses for the children and the children, and this situation negatively affects and hinders the education that is intended to be given to the children. Regarding this, one participant said, "We tell about the child's situation, he does not want to accept it so much that he takes the child to different courses or activities outside of school, forcing the child and himself, and then accusing us of inadequacy (K3)", another said, "It is as if the teacher has a magic stick in his hand, they think we will create miracles, we receive instructions to get this and that done, but when we ask them to have it done again at home, we are left empty-handed, the parent does not want to disturb their comfort (K2)", and another says, "The parent comes to school all the time, he says I can't leave my child. - There is no education, there is no sanction, or it cannot be applied (K6)". Some teachers even stated that some parents ensure that their children stay in special education in order not to send their children to the military or to lose the salary received from the state.

In addition, one participant said, "The evaluation of the child should not be left to the parents, the parent may act emotionally or consider different interests, some parents see their child as an additional source of money, especially if the economic situation is bad, we say that the child can continue normal education, no, it is better, otherwise, (K8)". Another says, "I don't want him to go to the military, I will do it if that's the way (K5)", while another says, "The education we give at school needs to be continued at home as well, but because it's easy for parents, they read what they know (K10)", and another says, "Almost every day, there are parents who say, "Let their children do this and that, (K1)".

3.4. Problems With Physical Space

When the answers given by the participants to the problems they encounter about the physical space are examined, they stated that instead of designing buildings and classrooms according to the situation and needs of the students, they were directed to classes that were created later or that did not respond to the requirements on the grounds that they were empty.

Regarding this, one participant said, "The classes that the children direct us to, keeping all of them together, do not meet the needs and may even become dangerous for some children. Unfortunately, there is

nothing protective for the children (K4)”, while the other participant said, *“There is not enough cleaning in the classrooms due to the lack of personnel. Since the heater is not provided, the classrooms are very cold, which causes the children to be sick all the time (K3)”*. Another participant said, *“We are trying to teach in multi-storey schools, but some children have a tendency to jump and some have a tendency to self-harm, although there is not much present, there is a risk, some of them hit the walls of the classroom, they hold us responsible if something happens. It would be much better if it was designed, because it was done without thinking in the classrooms in the past (K1)”*, while another said, *“Personal care areas are quite inadequate, there must be a sink, toilet, kitchen in order to gain some behaviors, “In my classroom they tried to set up an area later on, but it was a makeshift thing (K5)”*.

3.4. Issues with other subject teachers

Finally, under this heading, the teachers mentioned the problems they had with the other teacher due to the fact that two teachers were assigned in the classrooms. Also, when they gave education in the same building with other schools, the branch teachers did not want to teach these classes, they did not take care of these students during their shifts, they reacted more harshly to these students compared to their own students. They stated that they were more distant from themselves.

Regarding this problem, one participant said, *“We are also the teachers of this school, they also do not act with understanding. The duty teacher should also take care of our students, but they call us by sending students, and our students can be treated more harshly even if they behave the same as the others (K6)”*, while another said, *“Teachers do not want to attend classes such as painting and music that would be very beneficial for students to take, some of them have very prejudices and the administration does not do anything (K5)”*. Another participant said, *“Some teachers at school do not know us or do not they behave like that, they do not want to communicate much (K2)”* and another stated that *“They do not invite us to their activities, there is a coldness and disconnection (K9)”*.

3.5. Solution Suggestions for Special Education Teachers’ Problems

Special education teachers stated that they have problems with school management, teaching process, physical space, parents and other field teachers, and that these problems are more common in some institutions depending on the conditions. They emphasized that even if some of the problems encountered cannot be eliminated, reducing them will increase their motivation and commitment to the school and contribute to more effective teaching.

Regarding this, a participant said, *“Parents, teachers in other fields, and school administrators do not have the slightest knowledge of special education, training should be given to the people involved in this regard, this both contributes to the development of a common understanding and acts more consciously, Parents can also accept their child as they are (K1)”*, while another said, *“The administration should be more active and make efforts to develop cooperation with other teachers, organize joint activities for this purpose (K3)”*, another participant said, *“The lack of materials they need should be addressed. Another participant stated that the school management or national education should allocate more resources to this field in order to eliminate the problems, to provide material and equipment support suitable for the levels of the students at different developmental stages, and to redesign the classrooms considering the situation of the students (K4)”*, another participant said; *“Evaluation of children should not be left to the parents, therefore this evaluation should be done with the joint decision of the Guidance Research, the school principal and the teacher, therefore the system should be rearranged to include them (K6)”*; while another said, *“Breaking the prejudice and negative perspective towards special education students. They stated that an information meeting can be held within the schools for this purpose (K2)”*.

In addition, one participant said, *“If school administrators come from different fields, they must definitely receive in-service training and the condition of having actually worked in special education for administrators (K9)”*, said, *“School administrators should organize especially informative trainings for parents, for this, guidance teachers should be given more training. should assign more tasks and avoid cooperating with the necessary units if necessary (K8)”*, another participant stated, *“Technology, design and visual arts teachers should be able to be used more in schools with special education students (K10)”* and *“Additional fees or fees that will make it attractive for other teachers to teach. additional points can also be offered (K7)”*.

4. Discussion, Suggestions

Special education is the work carried out in a separate educational environment through a separate training program by the personnel trained for children with special needs. In other words, it is the training conducted to eliminate the deficiencies in the fields of academic, communication, movement and adaptation in individuals. Through special education,

educational aspects are tried to be organized by preventing, reducing or eliminating the behaviours that are seen as defective in individuals (Özsoy et al., 2000).

The main purpose of special education is to focus on the features that children can do and develop, rather than their differences, and to make them self-sufficient by gaining the necessary knowledge and skills (Diken, 2017).

The achievement of the desired goals of special education and the desired level of results are related to the realization of other elements as well as the teacher element. In this context, elements such as management, parents, and physical space elements are of great importance and the teacher can make and implement more effective plans in an environment where the necessary conditions are met. The problems faced by teachers working in special education differ from teachers working in formal and non-formal education schools due to student qualifications and differences. Various studies have been conducted on this subject, among them the problems that teachers encounter with family, administrators, system and system administrators (Ceyhun & Kaya, 2013; Karasu et al., 2013), job satisfaction of special education teachers by considering different variables. (Piştav Akmeşe, Kayhan, & Demir, 2013) and the problems experienced by special education teachers in classroom management, classroom communication and teaching skills were also encountered.

Identifying and eliminating the sources of problems that affect the effectiveness and work efficiency of special education teachers is important in terms of maximizing the potential of students and teachers.

It is known that special education teachers face various difficulties and problems throughout their professional lives, as they have to provide education to students who show less physical, social and cognitive developmental characteristics compared to their peers.

In this study, it has been determined that the main problem areas faced by special education teachers are related to school management, teaching process, physical space, parents and other field teachers. The solutions they put forward for these problems are generally to support special education teachers by providing the necessary resources, support and appreciation for their work, to be sensitive to their needs, to ensure continuous cooperation, communication and interaction between other field teachers, parents and relevant stakeholders and special education teachers. activities should be created to increase They also stated that students with similar characteristics should be placed in the same classes, so that they could more easily show each student the individual attention they need.

In the teaching process, it is necessary to eliminate the lack of materials they need, to provide material and equipment support suitable for the levels of students at different developmental stages, to allocate more resources to this field by the school administration or national education for this purpose, to redesign the classrooms considering the situation of the students, and to determine the quality of special education. stated that it would increase their commitment to their school.

When the opinions of the teachers participating in the research are examined, in order to eliminate or reduce the problems encountered;

- Seminars, courses and distance education services can be provided to parents, teachers and school administrators through different institutions, and their quantity and quality can be increased in order to facilitate access.

- The physical conditions, teaching materials and equipment needs of the classes where students with special educational needs are present should be met and necessary initiatives should be taken in this regard.

Qualified, informative, awareness-raising and guiding education should be given to families of students with special needs.

- Various activities can be organized to increase communication and interaction with school administrators and other field teachers.

- Teamwork can be encouraged by providing active communication and cooperation with other teachers, school management and parents.

- Connections with different professional communities can be established for special education teachers to share their experiences and exchange information with other colleagues.

In addition, providing professional development opportunities for special education teachers to continuously improve themselves, effectively cooperating with other teachers, administrators, parents and experts, keeping communication channels open, encouraging information sharing through regular meetings, e-mail communication or online platforms. Determining teaching strategies taking into account students' strengths and weaknesses, conducting regular assessments to monitor students' progress, providing support by the administration to teachers in matters such as classroom arrangement, allocating support staff, and necessary

physical arrangements, in other words, a responsive and inclusive environment of the school in general. It is also important to provide emotional support to teachers.

5. Conclusions

Special education practices differ considerably from formal and non-formal education in terms of method, content and organization of educational environments. The organization and development of educational practices and the ability to provide special education services to the desired extent are closely related to the teacher. In this study, which was carried out to determine the problems and expectations of special education teachers who work in our country and have an important place, it is aimed to increase the quality of special education by developing solution suggestions. Eight school administrators, who were determined by criterion sampling and maximum diversity sampling, which are among the purposive sampling methods working in schools of various types and levels in Aydın province, participated in this research, which was handled in the case study design, which is one of the qualitative research methods. The data obtained by face-to-face interview method were analyzed by content analysis. As a result of the analysis of the data, it was determined that special education teachers mostly had problems with school administration, teaching process, student parents, physical space and other field teachers. Identifying the problems of teachers participating in the research is important in terms of increasing the quality of special education and contributing to increasing interaction.

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Research article

Learning Local History and Culture Through Museum Visits

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Abstract: This study described how social studies preservice teachers learn local history and culture through museum visits. It employed a qualitative descriptive research design involving ten social studies preservice teachers selected through purposeful sampling. Data were collected through a written interview and analyzed using thematic analysis. Through museum visits, social studies preservice teachers learned the following: visual driven through images, relics and artifacts, and multimedia presentation; audio/oral driven through curator explanation and peer discussion; text driven through text description; and actual experience-driven through applying learning from exhibits, giving a point of view from the past, and wearing traditional attire. Preservice social studies teachers can learn about local history and culture by visiting museums. This study emphasizes the value of museums in preserving and promoting local heritage and culture, as well as how they can be a valuable resource for learning about local history and culture.

Keywords: history; culture; museum visit; pre-service teachers, social studies

1. Introduction

Learning local history and culture stimulates learners as historical human beings (Umasih et al., 2019), allowing them to appreciate different cultural and historical collections (Mujtaba et al., 2018). It encourages students to explore the past while being inspired by heroes, events, and ideas (Febriani, Sunardi, & Pelu, 2022). Moreover, recent studies suggest that unique museum collections engage students (Giblin, Ramos, & Grout, 2019) and evoke potential heritage interpretation (Packer, Ballantyne, & Uzzel, 2019), thereby cultivating their capability to understand (Subakti, 2010; Rahayu, Sariyatun, & Agung, 2018), and boost their knowledge of history and culture, making them more culturally and historically sensitive to specific endeavours (Ysulana, 2021). Furthermore, learning local history and culture through museum visits provides students with knowledge and opportunities to learn by experience (Andre, Durksen, & Volman, 2017), breaking the boundaries between school and the outside world (Permana & Pratama, 2020).

While museum visits allow students to appreciate local and national collections (Mujtaba et al., 2018), this is unsatisfactory as previous studies of gaining knowledge through museum visits have not examined the effectiveness of it as one of the learning strategies for Social Studies preservice teachers. These studies focus only on learning local history and culture as beneficial for students' development, allowing them to appreciate the importance of different local cultures and history. With this, researchers identified knowledge gaps in previous studies which occur when: There may be a lack of knowledge in the theory and actual fields of literature from related research fields, and the research results may differ from expectations (Müller-Bloch & Kranz, 2015). In addition, the prior research did not address integrating the perspective of Social Studies preservice teachers in learning using museum visits. This encompasses new dimensions using reflections to imply the learnings acquired by the students. Museum visits provide knowledge and opportunities that are important for the learning process and allow learners to be a part of the history and culture of the rich past of the locality. The learning of local culture and history to Social Studies preservice teachers should be explored further to provide an understanding of why such is not the case with the prior studies (Miles, 2017). As for this case, these studies indicated that museum visits benefit students' development (Umasih et al., 2019), focus on the unique museum collections which engage students

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(Giblin, Ramos, & Grout, 2019), and evoke a potential heritage interpretation (Packer, Balantyne, & Uzzell, 2019) which is not specified to the preservice teachers' reflection to learning. However, one question that needs to be asked is: How do Social Studies preservice teachers learn local history and culture through museum visits?

2. Materials and Methods

2.1 Research Design

This study employed a qualitative descriptive research design. It provides an authentic insight into preservice teachers' experiences (Silverman, 1997; Stenberg & Maaranen, 2020) to fully understand and gather specific experiences (Coughlan, 2020). Using the qualitative-descriptive design enabled researchers to capture in-depth and comprehensive accounts of the studied phenomena (Neergaard et al., 2009; Guy, Hughes, & Ferris-Day, 2022), and help maintain the accuracy and give a better understanding of what is being explored (Guy, Hughes, & Ferris-Day, 2022). This research is anchored in experiential learning theory by acquiring knowledge through connecting to personal experiences, using engagement, and encouraging critical thinking (Kolb, 2014; Silguero, 2020). Likewise, this study is anchored on constructivist epistemology and naturalistic inquiry methodology.

2.2 Informants

This study involved ten Social Studies preservice teachers using the purposeful sampling method, also called “judgmental, selective, or selective sampling” (Domingo, 2018; Pedroso, 2021). Moreover, the following specific set of inclusion criteria was observed in selecting the informants: (a) bonafide students of West Visayas State University taking the Bachelor of Secondary Education with a Major in Social Studies; (b) completed the three museum visits conducted by the Social Science Students Society; (c) one of the organizers of the museum visits in the organization; and (d) with General Weighted Average (GWA) of at least 1.49 in the First Semester of school year 2022-2023. The table that follows shows the ten (10) Social Studies preservice teachers with their assigned pseudonyms for anonymity.

Table 1. The Informants' Profiles

Social Studies Preservice Teachers	Age	Sex	Year Level
Stephen	19	M	First
Aliza	19	F	First
Ybarra	20	M	Second
Jaime	22	M	Third
Pablo	21	M	Second
Rosa	20	F	First
Kim	19	F	First
George	19	M	First
Clyde	19	M	First
Jomer	19	M	First

2.3 Data Gathering Instrument

The instrument utilized was a researcher-made written interview guide that allows informants to express their beliefs, experiences, and gained knowledge through recalling, considering, and evaluating experiences (Rogers, 2002; Juuti et al., 2021) in relation to learning local history and culture through museum visit. It was duly-validated by experts in the qualitative research and pilot-tested among selected non-participants of the study.

2.4 Data Collection Procedure

The data included in this research study was gathered using Google Forms. Ethical considerations were highly considered to ensure the confidentiality of the informants. A permission letter that includes the research information, waiver, and consent ensures the informants' safety and privacy at the highest level. Requests to conduct the study was sent to the informants for approval. Informants were also given ample time to answer the reflection question.

2.5 Data Analysis Procedure

To analyze the data, Braun and Clarke's (2006) thematic analysis was employed. This technique assessed the qualitative data in which the researcher attentively studies to find recurring themes, subjects, concepts, and conceptual structures (Caulfield, 2019). The process involves analyzing data to identify how social studies preservice teachers learn local history and culture through museum visits. Consequently, the themes were organized that form the narratives (Pedroso, 2021).

3. Results

Preservice teachers of social studies learn about local history and culture through visual, audio/oral, and hands-on experiences.

3.1. Visual-Driven

Visuals are a powerful tool for learning and a great way to discover local culture and history through a museum visit. Visitors examining exhibits, artworks, relics, and artifacts help gain a deeper understanding of the past and cultural setting. The following are the categories identified in how preservice social studies teachers learn local history and culture through museum visits, namely: images of the past; relics and artifacts; and, multimedia displays.

3.1.1 Images

Images displayed in museums have a significant impact on learning local history and culture, as they offer vivid glimpses into the past and help visitors form deeper connections with historical events and cultural traditions (Mujataba et al., 2018). These visual representations serve as authentic records of a region's heritage, shedding light on the lives of its people, their customs, and societal changes over time (Liu et al., 2022). Such images can instill a sense of pride and identity within local communities by celebrating the distinct aspects of their collective history and cultural legacy, which help learners in learning their local history and culture. According to Rosa, she learns a lot about local history and culture through reflecting on the display images, especially on the photos taken by Felix Laureano. Stephen also added that pictures and physical appearances of cultural objects deepen his understanding of the ways of life of past "Ilonggos". Image displays in museums play a crucial role in learning about local history and culture. They provide a visual representation of the past, allowing us to see and understand the people, places, and events that shaped our communities. By studying these images, we can gain a deeper appreciation for our heritage and a better understanding of our place in the world.

3.1.2 Relics and artifacts

Relics and artifacts are important museum displays. They provide a tangible link to the past and help us understand how people lived in the past and what their culture was like (Triunfante, 2021). Interaction with these tangible objects helps discover details and information necessary for learning about local culture and the past (Not et al., 2019). Social studies students reflected on how they learned local history and culture through museum visits. According to Aliza, exploring collections of artwork, artifacts, and preserved objects has helped him gain a deeper understanding of the diverse histories and cultures present in the community. Additionally, these artifacts that were used in the past allowed Jaime to grasp what life meant at that period in time. Moreover, for Kim even just the actual copies of these artifacts showcase and reflect how our ancestors lived back then. Furthermore, George reflected on how artifacts and relics help him understand the past and culture, which shapes the present of the community he belongs to. Relics and artifacts play a crucial role in understanding the history and culture of a local community. They provide tangible evidence of past events and practices, allowing us to learn about the lives and beliefs of those who came before us. By

studying these objects, we can better appreciate the traditions and customs that have shaped our world today.

3.1.3 Multimedia displays

Multimedia displays in museums significantly enrich the learning of local history and culture by providing interactive and immersive experiences. Multimedia displays in museums are dynamic exhibits that help visitors form deeper connections with historical events and cultural practices (Mohammed, Jamhawi, & Rashid, 2022). It presents complex narratives and diverse perspectives, and multimedia displays offer a more comprehensive and inclusive understanding of local history and culture (Nikonova & Biryukova, 2017). Multimedia displays in museums are also important to further deepen the insight and experiences of students and other museum visitors. According to Pablo, multimedia presentations enhanced his learning experience during museum visits. Multimedia displays cater to various learning styles, making the museum experience accessible and enjoyable for a broader audience. Furthermore, it helps to gather interest and attract visitors' attention (Yumei, 2020).

3.2. Audio/Oral-Driven

One of the most important things in having museum visits is the presence of audio or oral factors in learning the collections, may these be in presenting collections and displays to the visitors. There are two categories identified with how social studies preservice teachers learn history and culture through museum visits through audio/oral factor, namely: (1), (2) Gives Point of View from the past, and (3) Wearing Traditional Costumes.

3.2.1 Curator Explanations

Jomer stated that learned so much during museum visits by listening to the curator. George stated that through the help of the curators, who give depth to the definition. Ybarra stated that listening to the curator/s played a significant role in my learning journey. Their narrations not only provided insights into the local history and culture but also facilitated a deeper understanding of the exhibits. In addition, Kim stated that with the help and assistance of the different curators of each museum, they were able to learn and dig up more about our very own culture and history. Aliza stated that owing to the knowledgeable and skilled curators who have comprehensively explained and educated them on the rich history, especially in Panay museums, it is now much simpler to liven up their identity as Filipinos as they honor, respect, and give importance to their history and culture. Jaime added that learnings were further supplemented by an explanation of the museum curator/facilitator. He would not have experienced the mentioned feelings if not for the concise yet elaborate explanation they were given. Also, Stephen, Pablo, and Rosa stated that interactive elements such as audio guides enhanced the learning experience and the curators discussed the significance and definition of their collections well. This audio/oral factor such as curator explanations became one of the informants' reasons regarding how they learn local history and culture.

3.2.3 Peer Discussion

Peer discussion is present not only in the actual classroom but also in museums. In line with this, George and Jomer stated that some of their seniors also have given additional information regarding their knowledge about the museum collections which is a great way to further add their knowledge in learning local history and culture.

3.3 Text-Driven

Text describing the artifacts and relics or any display in the museum is helpful to visitors to recognize and identify specific museum displays easily. This text can be beneficial in giving context and background information about the objects, as well as the people and events they represent. There is a single category identified how social studies preservice teachers learn local history and culture through museum visits, namely: Display descriptions.

3.3.1 Display descriptions

Text descriptions of exhibits in museums are essential. They help visitors understand the local history and culture and give background information that helps them appreciate the significance of the artifacts on display (Jarosz, 2021). These descriptions also help in

connecting the dots between different exhibits and understanding how they relate to each other (Chu & Mazalek, 2019). By providing a deeper understanding of the cultural and historical significance of the artifacts, the text descriptions help students engage with the exhibits on a more personal level. Some of the informants reflect on how text descriptions help them in learning the past and culture of their community.

According to Ybarra, the museum offers a brief yet precise information for its audience to learn. Reading the details presented gives an intriguing sense that pushes to learn deeper about the local culture that a certain museum offers. Also, Rosa and Kim stated that displays with detailed explanations accompanying each artifact help them understand the contribution and significance of such museum displays. George added that, moreover, the texts next to the specific relic or artifact is a great help to know and understand what the displays are. Furthermore, according to Jomer, texts provide information about the specific artifacts in the absence of a curator to discuss.

Reading text descriptions of a museum display helps to stimulate knowledge and understanding about culture and history of a local community (Simon, 2023). It encourages learners to reflect on their experiences and perspectives, making the museum visit more meaningful and memorable.

3.4 Actual Experience-Driven

Actual experience enables students to learn local history and culture through first hand. Local museums serve as an excellent resource for learning about the local history while also fostering a sense of community (Richardson, 2023). There are two categories identified with how social studies preservice teachers learn history and culture through museum visits as it shapes actual experience, namely: (1) Applying Learnings through Exhibits, (2) Gives Point of View from the past, and (3) Wearing Traditional Costumes.

3.4.1 Applying Learnings through Exhibit

Museum exhibits enable viewers to relate the story being portrayed to their own lives. It provides a place where people may see themselves and be seen (Roto, n.d.). Aliza stated that drawing from his personal experience, he acquired knowledge by immersing himself in exhibits. Also, closely examining the objects themselves allowed him to develop an appreciation for the artistry and craftsmanship involved. Rosa also stated that museum visits enabled her to dig deep into the context of local history and culture through learning in exhibits. For instance, learning the history of the photography of Felix Laureano and the culture of Panay's Indigenous Peoples. This actual experience factor such as applying learnings through exhibits became one of the informants' reasons regarding how they learn local history and culture.

3.4.2 Gives Point of View from the past

Another consideration for students in learning local history and culture through museum visits is that they can imagine themselves as part of the past. Jaime stated that the sophistication brought about by these materials tempted him to be in the shoes of someone who has lived in the past. It was as if he were experiencing a mere speck of what life was. It is essential to feel the presence of the past in order to learn from it.

3.4.3 Wearing Traditional Attire

Actual experience allows students to execute the wearing of traditional costumes which enable them to appreciate the richness of their culture and history according to Clyde. People who are dressed in their locality's traditional attire together have a sense of shared culture, of being connected to one another, and of being a part of the community (Shaikat, 2023). Figure 1 shows themes and key categories.

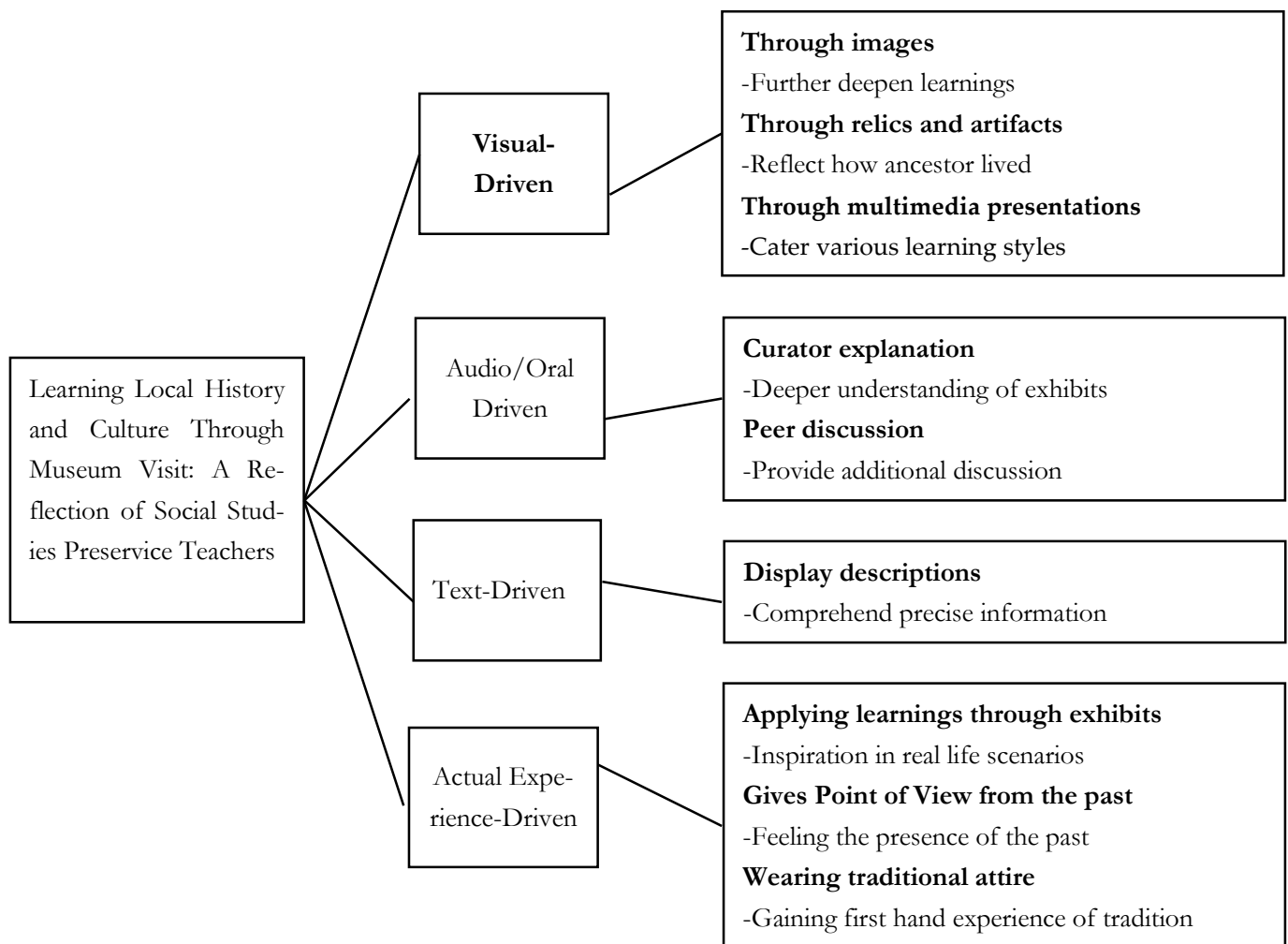


Figure 1. Demonstration of Meaningful Categories

Note: The diagram was created to present the Themes and Key Categories of how Social Studies Preservice Teachers learn local history and culture through Museum Visits. Fig. by Pedroso, Gicole, & Sarches (2023)

4. Discussion

The considerations of how social studies preservice teachers learn history and culture through museum visits were elaborated as the results implied four themes such as visual-driven, audio/oral-driven, text-driven, and actual experience-driven. Nine key categories emerged from the answers after carefully examining the written transcripts based on the themes. The findings of the study revealed museum visits made the social studies preservice teachers find another effective way of learning local history and culture aside from the classroom through the characteristics of different museums which helped them gain further learnings of how their locality was shaped. They also integrated methods regarding how they learned in museums effectively adhering to their own ways of absorbing information. These findings have not been addressed by the previous researchers making the findings of this study a significant contribution in the field of social studies research. Unexpected results included the multimedia displays because the researchers expected that in visuals, only relics, artifacts, and pictures could help, but with the integration of technology, it further helped the understanding of museum visit. Additional unexpected results included that visitors could not manipulate the things found in the museum, but in the study, it was found out that they could also wear traditional costumes.

Visual driver shows that images, relics and artifacts, and multimedia displays further enhanced imagination allowing these preservice teachers to see and understand the people, places, and events that shaped their communities which also provided interactive and

immersive experiences. Such visuals serve as a tangible connection to the past, allowing students to immerse themselves in historical events and cultural practices and gain a deeper understanding of their significance. Using these historical and cultural relics and artifacts from their locality leads students to understand their locality's past culture and history (Syaputra, Sariyatun, & Ardianto, (2020). Also, images such as portraits and photos displayed in museums serve as visual gateways for students to explore their local history and culture, providing tangible connections to the past. These visual artifacts offer insights into the lives, customs, and experiences of previous generations, fostering a deeper understanding and appreciation for the students' cultural heritage. This is noted by Mujataba et. al (2018) stating images and such visuals offers a clear path through time providing students new knowledge and perspectives. On the other hand, multimedia displays offer an interactive and engaging learning experience that enables students to better understand their locality's history and culture. It caters to various learning styles of students through visual, auditory, and tangible elements making complex concepts become more. Wilson-Barnao (2018) suggests that museums have transformed from being mere repositories of artifacts to dynamic spaces that utilize new technologies and strategies to foster engagement, facilitate interpretation of cultural and historical significance, and accelerate learning.

Audio/Oral drivers such as curator explanation and peer discussion became crucial as these provided further discussions, deeper understanding of the exhibits, and concise yet elaborative explanation to the museums' visual displays and descriptions. Previous research conducted showed that the role of curators in museum studies is commonplace: they are in charge of preserving and interpreting works of art as well as giving tours and educational programs to the public and instructing students about historical objects from a certain era (Schertz, 2015). Another study showed that the impact of the value and definition of learning in museums by students and teachers leads to some discussion between students with their peers supplying further information (Griffin, 2004). Thus, these studies are aligned to the present study as curation and peer discussions are needed more than just other ways of learning in museums.

Text drivers such as descriptions of artifacts, relics, and other museum displays are helpful to learn about local history and culture. It provides context and background information allowing them to understand the artifacts and their significance. According to the previous research of Ariffin and Zainal Abidin (2019), the purpose of the text in a museum display is to communicate important information about the locations and artifacts on exhibit through specific nouns, which helps visitors establish connections and gain a deeper understanding of the cultural and historical significance of each artifact. Also, well-written text descriptions can spark curiosity and encourage students to ask questions and engage in discussions. This active learning process can create a more meaningful and memorable educational experience (Yalovitsyna, Volokhova, & Korzun, 2019). Furthermore, text descriptions serve as starting points for students to explore and further research the significance of the artifact to the history and culture. Students may be inspired to delve deeper into the subject by reading the text about an artifact or historical event, broadening their knowledge and appreciation of their local history and culture (Windhager et al., 2019).

Actual experiences such as applying learnings through museum exhibits, giving point of view from the past, and wearing traditional attire in the local context enhances preservice teachers' experiential learning in a way that they put themselves in a situation wherein they act as the first-hand learners. Previous study has demonstrated that openness is connected with people's ability to immerse themselves in their environments, for example, in doing activities during museum visits (Weibel et al., 2010; Meyer et al., 2023)). In addition, museums are becoming more audience-centered and are required to consider the needs of the potential visitors when planning activities and exhibitions (Hooper-Greenhill, 2006). Museum visits provide important learning opportunities for people across the lifespan. People can use the exhibitions and activities in different museums as reflections of themselves, the present moment, and the past to gain first-hand experience (Falk & Dierking, 2018). Additional studies also indicated that museum visits focus on the unique museum collections which engage students (Giblin, Ramos, & Grout, 2019), evoke a potential heritage interpretation (Packer,

Ballantyne, & Uzzell, 2019), and creative imagination which describes ease in visualizing things (Soto & John, 2017). Thus, learning in museums provides cognitive and affective skills by reinforcing prior knowledge through direct concrete experience.

This study had several strengths, these are opportunity of preservice teachers to share perspectives, thoughts, and experiences themselves by providing valuable insights, investigated the effectiveness of experiential and place-based learning approaches in the field of local culture and history and described how these methods shaped preservice teachers' understanding of their local culture and history, contributed to the broader field of multicultural education and inclusivity which described exposure to diverse perspectives and narratives, contributed to understanding how learning about local culture and history influences students' sense of identity and belonging, and explored the ways in which students connect their personal experiences, heritage, and community with their social studies education. The study has potential limitations. First, limited sample representativeness which involved a specific sample of social studies students distinguished by their qualifications. The results obtained in this study may not be applicable to students outside of this field. Second, self-reporting and social desirability bias which have possibly relied on self-reported data obtained through interviews. Students may possibly have provided socially desirable responses or may not accurately recall their experiences, leading to bias in the data. Third, the study covers only how social studies preservice teachers learn local culture and history, in which other disciplines are not included. Finally, outside influences including prior knowledge, socio-cultural background, and the classroom environment may have had an impact on the students' reflections and experiences. It is crucial to recognize these limitations in order to ensure a fair assessment of the study's findings and to promote future research that specifically addresses these constraints.

This study recommends that social studies preservice teachers should focus on the factor of how they learn most effectively in museums. Also, further research can be improved by integrating other fields of social studies in learning through museums, not just limited to local culture and history. Furthermore, the study should be expanded to include a more diverse and representative sample of social studies students from different schools, grade levels, and cultural backgrounds which can provide a broader understanding of how learning local culture and history impacts students across various contexts. Lastly, additional research to measure the impact of learning local culture and history on students' academic achievement, critical thinking skills, cultural competency, and empathy could also be utilized to include quantitative data rather than qualitative. By considering these research recommendations, the study can further contribute to the field of social studies education.

5. Conclusions

Museum visits can be a rich and immersive way to learn about the history and culture of a place. Learning from museum visits is an ongoing process. Different museums may interpret history and culture differently, so visiting multiple institutions can provide a well-rounded view. Museums can be a great place to learn about local history and culture, but they may not provide a complete or unbiased picture. To develop a well-rounded understanding, it is critical to approach the information with an open mind, seek multiple perspectives, and continue to explore other sources.

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Research Article

Social Studies Practice Teacher's Views on Culturally Responsive Teaching

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Abstract: This study aimed to describe the views of social studies practice teachers on culturally responsive pedagogy (CRT). A qualitative-descriptive research design was employed, utilizing a written interview guide to collect data from eight purposefully selected social studies practice teachers. Thematic analysis was employed in analyzing data, with Culturally Relevant Pedagogy Theory serving as the theoretical framework. The findings revealed five meaningful categories that encapsulated the views of social studies practice teachers on CRT. Firstly, in terms of academic success, CRT was viewed to foster a positive learning environment and employ relevant pedagogies. Secondly, regarding cultural competence, CRT was viewed to establish sensitivity towards diversity and promote healthy coexistence. Lastly, in relation to sociopolitical consciousness, CRT was viewed to encourage active citizenship. This study holds educators to benefit from the insights gained, as they provide guidance on creating a positive learning environment and developing strategies that cater to culturally diverse students.

Keywords: practice teachers; culturally responsive teaching; social studies

1. Introduction

Culturally-relevant teaching is beneficial in encouraging equitable excellence, empowering those who are frequently silenced, and ensuring that every child is seen (Samuels, 2018). Culturally-responsive teaching is a type of teaching which centers classroom instruction in multi-ethnic frames of reference (Gay, 2018). Understanding that education is not apolitical, teachers who engage in culturally responsive teaching raise students' critical consciousness, develop students' awareness of community problems, and give students opportunities to participate in decision-making (Byrd, 2016). Culturally-Responsive teaching requires students to develop a commitment to service as well as social justice ideals (Bassey, 2016). Thus, to sustain a democratic way of life, there is supposed to be a cultivation of appreciation for cultural diversity in a social studies classroom (National Council for the Social Studies, 2010).

Culturally-Responsive Teaching which considers students' cultural realities has a positive impact in improving the involvement of students on their learning and academic achievement (Aronson & Laughter, 2016; Byrd, 2016; Wah & Nasri, 2019). Students' academic knowledge and skills are more meaningful, engaging, and easily learned when they reflect their lived experiences and frames of reference (Gay, 2002). It can be used in classrooms to implement a truly transformative social justice agenda because it engages all students' civic citizenship, keeps them alert, and empowers them to actively participate in the struggle for social change (Bassey, 2016). Neoliberal reform efforts including curriculum standardization and standardized testing increased the marginalization of culturally relevant pedagogy (Sleeter, 2012). Despite the gaps between the desire of teachers to teach in alignment with culturally sustaining pedagogy and their ability to do it due to curriculum restrictions, culturally sustaining teaching can serve as a framework to improve teaching and learning with practicing teachers (Thomas, 2021).

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Although there are enough studies conducted on the cultural responsiveness in education setting regarding its implication, impact, and effectivity in education and the society, there is still a limited study that covers both the practice teachers and the local setting. There are little research documenting models of Culturally Sustaining Teaching, particularly in social studies, that can help us understand what it can look like in practice (Martell & Stevens, 2019). Furthermore, Culturally Relevant Teaching in social studies can assist teachers in actualizing students' ideals of developing a sociopolitical consciousness about the potential and pitfalls of democracy (Akinyele, 2018). Culturally Relevant pedagogy recognizes the value of lived experience by marginalized groups in understanding and making meaning of the world (Brown-Jeffy & Cooper, 2011). Through interviews or narrative by the participants of the study, the researchers would be able to describe the views or perceptions of Social Studies Practice Teachers on Culturally Responsive Teaching. Specifically, this study sought to describe their views based on three criteria of Culturally-relevant pedagogy theory by Ladson-Billings: academic success, cultural competence, and sociopolitical consciousness. This study suggested that culturally-responsive teaching can produce students who can achieve academically, produce students who demonstrate cultural competence, and develop students who can both understand and critique the existing social order.

2. Materials and Methods

2.1. Research design

This study employed a qualitative-descriptive design to describe the views of social studies practice teachers on culturally-responsive teaching. The goal of qualitative descriptive studies is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals (Lambert & Lambert, 2013). The study on culturally-responsive teaching is supported by the culturally-relevant pedagogy theory which is a theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate, (Ladson-Billings, 1995). It has three criteria namely: academic success, cultural competence, and sociopolitical consciousness.

2.2. Informants and Sampling

The informants of this study were eight (8) purposely chosen college students of a local university. They were selected through purposeful sampling technique to attain the objectives of this study. The inclusion of the informants was based upon these criteria: (a) a student of a local university, (b) a social studies practice teacher (c) have/had experienced engaging with different cultures, and (d) have/had taught culturally-diverse students. Table 1 displays the profile of the informants. The informants were assigned pseudonyms to maintain confidentiality.

Table 1. Profile of Informants

Social Studies Practice Teacher	Age	Gender	Address	Have/had engagement with diverse cultures
Ray	23	M	Capiz	Yes
Thea	22	F	Janiuay, Iloilo	Yes
Divine	22	F	Tigbauan, Iloilo	Yes
Bea	22	F	Iloilo	Yes
Arra	23	F	Antique	Yes
Joseph	23	M	Aklan	Yes
Marie	22	F	Antique	Yes
Joy	22	F	Barotac Nuevo	Yes

2.3. Instrument

A written interview guide was utilized for this study. The interview questions that were formulated revolved around the experiences of the informants in a culturally responsive classroom. The written interview guide was validated by three experts in qualitative research using Rubric for Expert Validation of Survey or Interview by Simon and White (2018). English language is the medium that was used by the researchers in formulating the question and the informants in crafting their responses.

2.4. Data collection

The following systematic steps were observed by the researchers in collecting the data: First, prior to data collection, the identified informants were contacted personally and through their social media and email accounts to brief them as informants of the study. Second, for efficiency and convenience, research instrument was administered using online platforms. A letter was sent to seek their approval regarding their participation in the study. The letter includes a brief background of the study, the conditions, and the interview question. Follow up questions were sent to the informants through the use of aforementioned modes of communication. If they agree, informants were given five days to answer the interview question that was sent. They were encouraged to send their answers via email, Messenger, or any online platforms of their choice. Lastly, the researchers downloaded and copied the informants' responses and compile them on a single file that will be then analyzed. With the help of waivers, written consent forms, and an authorized letter of information, informants' willing participation in this study was acquired. The researchers upheld complete confidentiality and anonymity throughout the data collection process.

2.5. Data analysis

After the informants provided their written responses, the researchers electronically copied the informants' written responses to the interview questions and compiled them on a single document for ease of use while evaluating the data. The data gathered underwent analysis, comparison, and interpretation using inductive content analysis which observed the process of abstraction to condense and classify data which enabled the researchers to answer research questions through concepts, categories, or themes (Kynğäs, 2020). Transcripts of the interview were organized to identify how Culturally Relevant Teaching promoted academic success, cultural competence, and sociopolitical consciousness (Ladson-Billings, 1995). Codes were assigned to the informants' comments and phrases based on the recurring themes. The researchers then created categories based on the detected codes and informants' responses. Thus, meaningful categories emerged. The reliability of this study was ensured as the researchers observed methodical data gathering procedures and processes for this study likewise the responses of the informants were analyzed and interpreted. The findings of this research were strengthened by related literature and studies chosen rigorously and cited properly.

3. Results

The results of this study were organized based on the three (3) criteria of culturally-relevant pedagogy theory presented by Dr. Gloria Ladson-Billings (1995) namely (1) academic success, (2) cultural competence, and (3) sociopolitical consciousness. To describe the views of social studies preservice teachers on Culturally Responsive Teaching, five (5) meaningful categories emerged: (1) fostering a positive learning environment; (2) employing relevant pedagogies; (3) establishing sensitivity towards diversity; (4) promoting healthy coexistence; and, (5) encouraging active citizenship.

3.1. Academic Success

Culturally responsive teaching is viewed as a facilitator of academic success for all students. There were two categories that emerged which relate how culturally-responsive teaching promotes academic success of students, namely fosters a positive learning environment and employs relevant pedagogies.

3.1.1. Fosters a Positive Learning Environment

Culturally-responsive teaching is viewed as a vital aspect in fostering a positive learning environment. This is divided into two subcategories (1) promotes healthy exchange of ideas and (2) provides equal learning opportunities.

- **Promotes healthy exchange of ideas**

Culturally-responsive teaching creates an environment where students comfortably express their diverse viewpoints.

RAY: "Students openly share their own ideas, experiences, and customs in relation to the subject by using their own dialect enabling a more productive and in-depth learning of a subject matter."

BEA: "Sharing individual ideas, experiences, perspectives, and customs freely without discrimination or unnecessary dissension is a testament to being culturally responsive to teaching."

ARRA: “Students were given the freedom to speak and opportunity to voice their opinions, insights and/or ideas during the discussion or in a certain topic specifically on real-life social issues.”

JOSEPH: “It ensures that students’ voices will always be heard and applauded as it encourages them to share their perspectives on different matters in order to understand the lessons through different opinions.”

- ***Provides equal learning opportunities***

CRT is viewed as a means of ensuring that all students have equal access to benefits and resources without discrimination or barriers.

BEA: “Culturally responsive teaching in my opinion is to teach students equally and treating them fairly despite their diversity and differences in cultural background.”

ARRA: “It is an approach in teaching which provides students with equal and inclusive learning opportunities in response to individual differences.”

JOY: “Despite cultural differences, students were being treated fairly and with respect. Students were given the equal opportunity to learn and share what they have learned inside the class.”

JOSEPH: “As a social studies teacher, integrating a culturally responsive teaching strategy is proven to efficiently provide equal learning opportunities to students.”

3.1.2. Employs Relevant Pedagogies

CRT is viewed as the collection of instructional strategies that are meaningful and appropriate for the learners’ contexts. This is divided into two subcategories, namely contextualizes instruction and utilizes relevant instructional materials.

- ***Contextualizes instruction***

CRT is viewed as an educational approach that connects learning content and activities to real-world contexts and situations.

THEA: “I would conduct CRT during my discussion by giving local or contextualized examples that are commonly happening around. This way, students will be hooked while we are having discussion and they will be able to relate and give their own experience to the lesson.”

DIVINE: “By giving examples that are localized and contextualized students will be more eager to learn and participate in class.”

- ***Utilizes relevant instructional materials***

CRT is viewed as the selection and incorporation of materials that are directly related to the subject matter being taught.

THEA: “Creating materials that are relevant to everyday life is important for students to engage in class. It would allow them to relate it (mostly on their affective aspect) in their daily life and they see it as a practical way to learn a lesson (cognitive aspect).”

BEA: “I will also make sure that my methods in teaching, as well as my instructional materials, are suited to their (students’) needs.”

3.2. Cultural Competence

CRT is viewed as a pedagogy that emphasizes the development of cultural competence among teachers. There were two categories that emerged which relate how culturally-responsive teaching promotes cultural competence of students, namely, (1) establishes sensitivity towards diversity and (2) builds empathy and respect for different cultures.

3.2.1. Establishes Sensitivity towards Diversity

CRT is viewed as the process of developing an awareness, understanding, and appreciation for the various dimensions of diversity in society. This is divided into subcategories, namely, (1) fosters a sense of belongingness and respect and (2) builds empathy and respect for different cultures.

- ***Fosters a sense of belongingness and respect***

CRT is viewed as the creation of an environment or taking actions that promote a feeling of inclusion, connection, and value among students.

RAY: “As a would-be teacher, embracing students’ diversity in each of their own individual aspects primarily creates an atmosphere of belongingness and respect for each and every student inside the academic spaces.”

JOY: “Culturally Responsive Teaching creates a sense of belongingness and respect toward each student in their academic spaces.”

MARIE: “A culturally responsive class promotes respect, inclusion, contextualization, and connection.”

- ***Builds empathy for different cultures***

CRT is viewed as a way of encouraging students to see the world through the eyes of others and invokes a sense of empathy towards people who come from different cultural backgrounds.

BEA: “Integrating a culturally responsive teaching in social studies is important to help students understand different perspectives and help them develop an empathy toward others.”

MARIE: “This pedagogy can also help teachers to establish a learning environment where learners feel safe to express their cultural identity, encourage students to be proud of their distinctiveness, and build empathy among learners.”

3.2.2. *Fosters healthy coexistence*

CRT is viewed as the conditions where different individuals or groups can peacefully and harmoniously live together in mutual tolerance despite differences or conflicting beliefs. This is divided into two subcategories encourages collaboration and establishes harmonious classroom climate.

- ***Encourages collaboration***

CRT is viewed as an atmosphere that fosters and promotes teamwork, cooperation, and joint efforts among students.

ARRA: “As a Social Studies teacher, it is important to create an inclusive, free from biases, and safe learning environment in which students learn, grow, and can work independently and collaboratively.”

DIVINE: “In activities, it is important to encourage students to collaborate with their peers and discover more of their peers’ heritage or cultures.”

- ***Establishes harmonious classroom climate***

CRT is viewed as the creation of an environment in which students feel safe, respected, and supported, leading to positive social interactions and effective learning.

DIVINE: “I would integrate culturally responsive teaching in my social studies class by creating a conducive and welcoming learning environment that allows students to be more open and comfortable while learning the lesson.”

ARRA: “It is important to integrate a culturally responsive teaching in Social Studies so that we are able to establish a harmonious and positive classroom climate where students learn to understand and appreciate individual differences.”

3.3. *Sociopolitical Consciousness*

CRT is viewed as a mechanism of instilling knowledge regarding the complexities of the social and political world and taking action to create a more inclusive society. There was one category that emerged which relates how culturally-responsive teaching promotes sociopolitical consciousness of students, namely (1) encourages civic engagement.

3.3.1. *Encourages real world learning*

CRT is viewed as a way of encouraging students so that they can have educational experiences that occur in genuine, practical, and meaningful contexts outside of the traditional classroom environment. This is divided into two subcategories namely (1) promotes civic engagement and participation and (2) transcends the classroom.

- ***Promotes civic engagement and participation***

CRT is viewed as the means of encouraging students to participate in their communities by taking an active role in shaping and influencing public affairs.

ARRA: “CRT creates opportunities for students to develop critical consciousness of everything around, not just inside the four walls of the classroom but in his own community/society.”

RAY: “It is also a subject that lays the groundwork for pupils to develop into better global citizens who see beyond themselves and work actively to improve society and its nations.”

- ***Trancends the classroom***

CRT is viewed as going beyond traditional classroom-based education and exploring alternative learning experiences and environments to embrace innovative approaches that enhance learning.

RAY: “Students can see themselves reflected not only in the curriculum but also as a part of the wider community in the social studies classroom.”

DIVINE: “Integrating culturally responsive teaching in social studies allows students to have extensive knowledge of the diversities not just in the classroom but in the community. With this, students can also improve their higher-order thinking skills, allowing them to learn social studies effectively.”

MARIE: “Culturally responsive teaching is integrated in social studies through interview, site-visit, and reaching out to locals.”

JOSEPH: “It is also a class that is not limited inside the binded papers of books and walls of the classrooms but it allows students to explore, observe, and learn in actual context which enable them to fully grasp the concept in cognitive, psychomotor, and affective aspects of learning.”

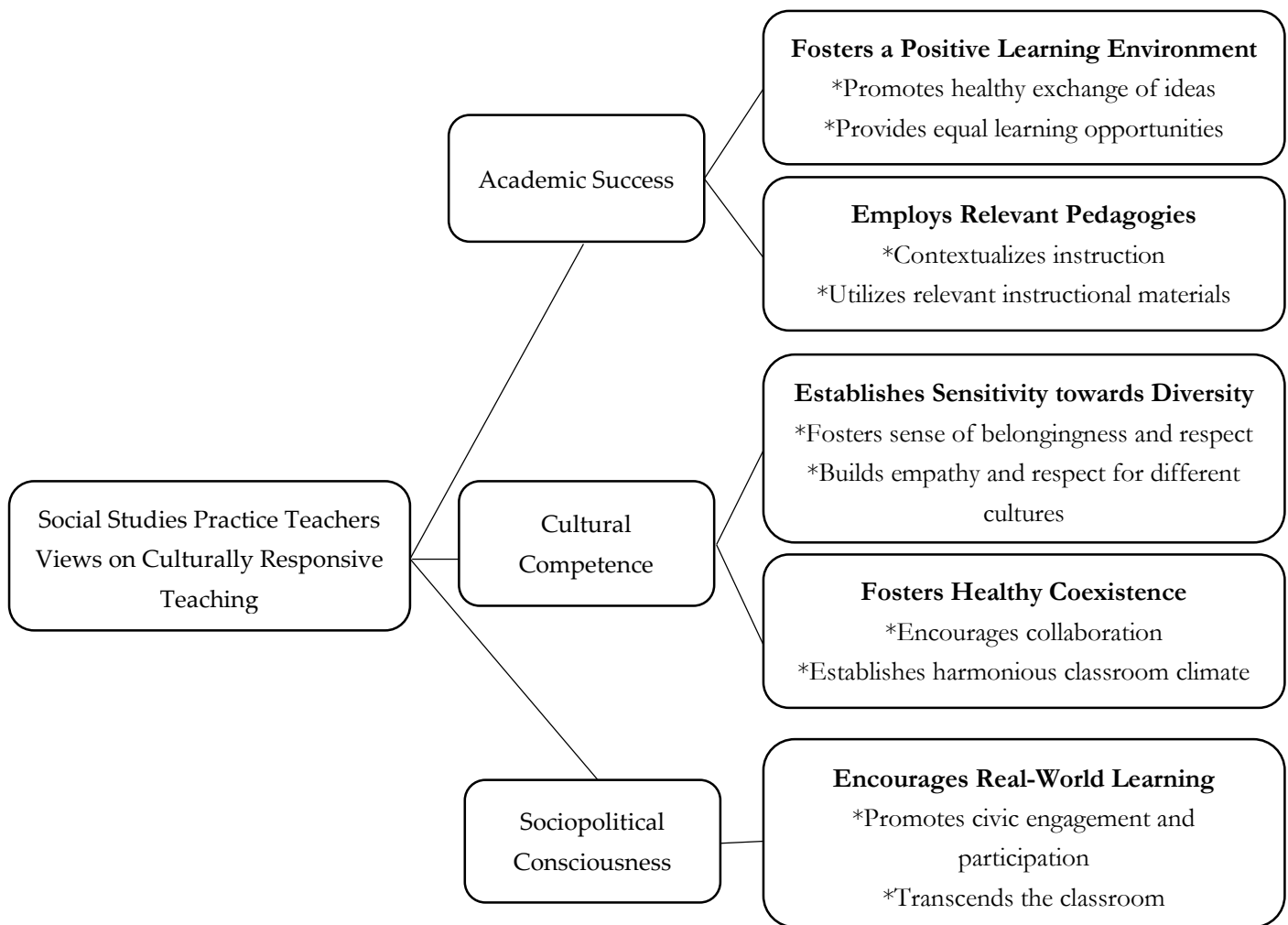


Figure 1. Demonstration of meaningful categories of the study

4. Discussion

This study describes the views Social Studies Practice Teachers on Culturally Responsive Teaching. Three significant themes emerged based on the criteria of Culturally-Relevant Pedagogy Theory by Ladson-Billings such as academic success, cultural competence, and socio-political consciousness.

In the 1970s, culturally-responsive teaching was emphasized and was extended into supporting struggling students’ cultural identities, aiming for academic success, and advancing educational equity (Frerie, 2005). In the late 1990s, the concept of “culturally relevant pedagogy” was introduced (Ladson-Billings, 1995). In 2000, the book “Culturally-Responsive Teaching: Theory, Research, and Practice” explored the concept and implementation of culturally-responsive teaching in the field of education (Gay, 2002). Teaching that is culturally responsive only happens when culture is naturally included into the curriculum, instructional and assessment strategies, and classroom management (Skepple, 2015).

Ladson-Billings (1995) identified CRT theory as suitable for higher education, equipping learners for diverse work environments and grooming them as global workers and leaders. One of the views on culturally-responsive teaching emphasizes academic success through fostering a healthy learning environment. A positive environment where diverse students feel trusted and respected is fostered through CRT (Colbert, 2010). This is supported by Ford and Kea's (2017) idea that culturally responsive teachers help students construct knowledge by leveraging their personal and cultural strengths. They create inclusive classroom environments where every student feels empowered, valued, and included. Similarly, Vavrus (2008) revealed that CRT strives to promote inclusive and inviting classroom and school cultures in order to develop culturally relevant approaches to improving academic goals for all students.

Additionally, the view that CRT is vital for fostering a positive learning environment correlates with the view that CRT is a way of promoting a healthy exchange of ideas. Dialogue and rich, meaningful conversations in learning is one of the best strategies for employing CRT (Samuels, 2018). Along with this is the view that CRT is an approach which provides students with equal and inclusive learning opportunities. A democratic goal of CRT is to end inequality which is experienced by low status students so as to close the achievement gap for these students (Vavrus, 2008). The teacher has the central role in providing an educational approach that gives equal opportunities for diverse students (Hunter, 2015).

As per interview, CRT is also viewed as an approach which employs relevant pedagogies to meet the needs of the learners. Teachers are expected to develop culturally responsive instruction in response to students' differences (Muniz, 2019). This implies the contextualization of instruction and utilization of relevant instructional materials in which the students can easily relate to. Teachers should empower all students through their teaching content and pedagogical practices (Egbo, 2018). Teaching material and teaching resources are helpful for teachers, as they show teachers appropriate ways of positively engaging with cultural diversity (Herzog-Punzenberger et al., 2020). Culturally relevant practices, like differentiated instruction and storytelling, enhance diverse students' learning through increased engagement and stronger cultural connection (Marosi, Avraamidou, & Galani, 2021). Students are more engaged and feel more a part of their schools when teachers try to relate lessons to their interests and utilize real-world examples (Byrd, 2016).

Another view of CRT emphasizes the promotion of cultural competence through establishing sensitivity towards diversity of learners. Culturally competent teachers foster courteous, welcoming environments in the classroom that encourage children to value and comprehend the cultures of their peers (Byrd, 2016). Teachers must adjust their teaching methods to accommodate the growing cultural diversity among students (Hunter, 2015). Along with sensitivity towards diversity is the need for respect and empathy. An important element in engaging students in the lesson was respecting their cultures in the classroom (Dreyfus, 2019). Teachers' ability to empathize is critical for navigating classroom diversity (Abacioglu, Volman, & Fischer, 2020).

CRT views pedagogy as an interactive process that prioritizes student engagement to combat passivity and places them at the heart of teaching and learning (Vavrus, 2008). The view that CRT helps foster healthy coexistence among students has also emerged from the interview. CRT is considered essential to answer the educational needs that arise due to the coexistence between differing groups of students (Meléndez-Luces; Couto-Cantero, 2021). Healthy coexistence correlates with collaboration and harmonious classroom climate. Collaborative learning among diverse student groups strengthens relationships, increases cultural awareness, and fosters acceptance of differences (Colbert, 2010). As to a harmonious classroom climate, it was found that in certain situations, exposing students to culturally different individuals resulted in positive intergroup relations, while in other cases, attitudes and interactions stayed the same or even deteriorated (Cotton, 1993).

Developing sociopolitical consciousness is one of the advantages of integrating culturally-responsive teaching in the learning process and it has been one way of viewing CRT. An excellent teacher facilitates student action to address real-world problems from a variety of perspectives related to the discipline that improve their community and/or world (Muniz, 2019). However, it has been found that teachers need more opportunities to engage in critical discussion to challenge the injustices and inequalities of the status quo (Ebersole, Kanahale-Mossman, Kawakami, 2015). Culturally-responsive and communicative teaching help foster critical thinking and social awareness to underlie the implications for students' experiential learning in the multicultural classroom (Berlian & Huda, 2022).

CRT is viewed as a way of encouraging real-world learning. Engaging students through real-life examples and connecting to their interests fosters greater classroom involvement and school connection (Byrd, 2016). Real-world learning correlates with both civic engagement and learning that transcends the classroom. Culturally responsive teaching in classrooms achieves social justice by activating civic citizenship, engaging students, and fostering active participation in social change (Bassey, 2016). Culturally relevant teachers also build bridges by bringing the outside world into the classroom and directing students to community service-learning opportunities (Byrd, 2016).

One of the goals of multicultural education is to promote improved intercultural relations. In some settings, bringing students into task-related and social contact with those who are culturally different from themselves led to positive intergroup relations. In other settings, attitudes and interactions have remained unchanged or even worsened. Thus, doing culturally responsive activities alone or in isolation was not as desirable, but having a culturally responsive perspective or purpose along with the culturally responsive activity held greater value (Ebersole, Kanahale-Mossman, Kawakami, 2015).

Since research has established a connection between culturally competent educators and positive outcomes for students, in attempt to encourage equitable excellence, give voice to those who are frequently silenced, and ensure no child is made invisible; educators must be prepared and equipped with tools to create and facilitate environments that embrace cultural responsiveness (Samuels, 2018).

The findings support the notion that culturally responsive pedagogy can produce students who excel academically, display cultural competence, and develop students who comprehend and critique the existing social order. This current study has numerous limitations that should be noted and maybe solved in future studies. First, a qualitative-descriptive design was used in this study to describe the perspectives of social studies practice teachers on culturally responsive teaching, which is only limited to a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals. Second, the number of informants (eight) may be insufficient to represent the entire student population and generalize the findings. However, quantitative findings that are supplemented by qualitative findings could provide a broader perspective and a more comprehensive knowledge of Culturally Responsive Teaching. Finally, the study relied on written-interview surveys, which are susceptible to self-report bias. Despite these limitations, this study gathered information about Culturally Responsive Teaching through the eyes of Social Studies Practice Teachers, which can be useful in informing and encouraging future scholars in related fields.

5. Conclusions

Culturally responsive teaching plays a key role in the lives of student teachers because it helps them develop the competencies needed to meet the needs of diverse learners, fosters inclusive learning environments, and promotes social justice in education. Student teachers can positively impact their students' lives and contribute to a more equitable and respectful society by incorporating culturally responsive practices into their teaching approach. As student teachers prepare to enter the teaching profession, they must be prepared to work effectively with diverse student populations.

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Research Article

Contextualized Strategies of Elementary School Teachers in Teaching IP Learners

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Abstract: Contextualized teaching strategies are instructional approaches that relate learning to a specific environment, scenario, or application area to target relevant skills and aid students' learning. This study explored the various contextualized teaching strategies employed by elementary school teachers in their instruction of Indigenous People (IP) learners. This descriptive-qualitative research employed in-depth interviews to gather data and analyzed using thematic analysis. Two significant themes emerged, namely the integration of local materials and the Glocal Approach. Likewise, the integration of local materials includes reading materials, modules, and contextualized storybooks, while the glocal approach includes the use of springboard, differentiated instruction, one-on-one sessions, and equity pedagogy. Providing IP learners with strategic contexts improves their learning process by inspiring interest, curiosity, motivation, and engagement with knowledge.

Keywords: contextualized strategies, elementary school teachers, indigenous people learners

1. Introduction

Quality education for indigenous people entails that it is founded on our distinct culture, understanding, languages, and learning-teaching traditions (Thaman, 2013). Most modern societies are interested in including everyone in the development and progress of their nations; it is no different from the Philippines (Wa-Mbaleka, 2013). The neocolonial foundation of the Philippine educational system creates inequality among particular cultural minorities who are able to attend school (Thaman, 2013). One of the minorities who are vulnerable to this is the Indigenous People, which need to adapt to and survive in the public education system (Rogayan Jr., 2019). Indigenous Peoples are different social and cultural communities that have ancestral links to the land and assets on which they live, occupy, or have been displaced (The Work Bank, 2023). When appropriately "recognized" and given favorable privileges through holistic education, they may be beneficial to society towards national progress (Eduardo & Gabriel, 2021).

The Indigenous Peoples' Rights Act (IPRA) was enacted in 1997 to preserve indigenous peoples' rights to their ancestral territory, sovereignty, history, and social justice. The IP communities' desire educational opportunities that react to local surroundings, respect their identities, and promote the value of their traditional knowledge, skills, and other components of cultural heritage (Education Department, 2011b). Without teachers' acknowledgment on how students live and learn in the context of their cultural differences, the educational system will be meaningless. It's the teacher's responsibility to do all in their capabilities to assist students to connect their learnings to life and to provide them with the necessary skills and knowledge (Paz, 2021). Assessing a teacher's point of view will highlight students' difficulties and academic goals in continuing education through diversity and inclusivity, as well as measure the efficacy of teaching approaches and techniques. The DepEd Order No. 22 Series of 2016 was adopted as a guideline for the allocation and use of Indigenous People Education (IPEd) and their right to basic education contextually sensitive to recognize their culture and promote

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their indigenous knowledge, abilities, and cultural identity (Valenzuela et al., 2022). Ultimately, teachers must recognize the diversity and complexity of IP learners in order to provide the best quality of education.

This study explores the teacher’s strategies, focusing on the context of IP learners’ culture and surroundings, as well as the resources they give to IP learners. In this context, Franz Boas’ theory (1887), also known as Cultural Relativism, allows a teacher to recognize and transmit universal concepts to learners from diverse cultures. Understanding people’s perspectives, knowledge, and actions in connection to their cultural setting is so essential (Cole, 2019). The implications of the Culturally Relevant Education research indicate that teachers from any ethnocultural background may be effective with IP learners when they possess the knowledge, attitudes, dispositions, abilities, and behaviors to fulfill students’ needs (Milner IV, 2017). Therefore, the purpose of this study was to explore the numerous contextualized teaching strategies used by elementary school teachers in teaching IP learners.

2. Materials and Methods

2.1. Research design

This study employed a qualitative research design. It was anchored on Constructivist Epistemology, a theory of how people learn or create meaning, and explains the nature of knowledge and the learning process (Ültanır, 2012). A theoretical viewpoint is a set of beliefs about reality that influence inquiries and developed responses (Crossman, 2020). Likewise, this design was utilized which focuses on details of what, where, when, and why of an event or experience. It sought to understand the human experience through life story interviews, oral histories, or other methods of human experience narrative (Ford, 2020). The study adapted Franz Boas’ (1887) theory of Cultural Relativism, which allowed teachers to perceive and impart universal concepts to students from other cultures. It is critical to comprehend teachers’ viewpoints, knowledge, and behaviors in relation to their cultural setting (Cole, 2019). In this sense, this design may be viewed as a lens through which we can look at the many contextualized strategies used by Elementary Teachers in teaching IP learners.

2.2. Informants

The informants of this study were six (6) elementary teachers who teach Indigenous People (IP) learners in the first District of Iloilo. Specifically, these informants teach a variety of subjects, including English, Science, Filipino, Math, AralingPanlipunan, and Mother Tongue-Based Education (MTBE). To find teacher informants who met the predetermined criteria, this study employed purposeful sampling, referred to as subjective or judgmental sampling, is a set of sampling processes that utilize the researcher’s discretion in determining the units to be investigated (Sharma, 2017; Pedroso, 2021). Furthermore, the informants were chosen based on the following inclusion criteria: (a) elementary school teacher who teaches IP learners, particularly in Tigbauan Central Elementary School in the Municipality of Tigbauan, Iloilo, and (b) has at least a year of teaching experience with IP learners. In labeling the informants’ responses per topic, pseudonyms were used to maintain their identities. Table 1 shows the profile of informants.

Table 1. Profile of the informants

Name	Age	Subject taught	Highest Educational Attainment	No. of years in teaching IP learners
Racqui	49	English	BEED w/ MA units	2
Kris	40	Filipino	Master’s Degree	1
Chy	51	Math	BEED w/ MA units	1
Lyn	55	Science	BEED w/ MA units	2
Ara	42	AralingPanipunan	Bachelor’s Degree	1
Jho	43	Mother Tongue-Based	BEED w/ MA units	2

2.3. Instrument

The study utilized a researcher-made interview guide duly- validated by experts in qualitative research was employed (McLeod, 2023) to conduct an in-depth interview. The

interview guide is divided into two (2) parts. Part I includes demographics that allow researchers to better understand particular backgrounds or details about the informants. Part II consisted a major question meant to obtain information regarding the various contextualized strategies utilized and implemented by the informants in teaching IP learners. To get the necessary information, the researchers asked a follow-up question to better grasp and comprehend what the informants genuinely intended.

2.4. Data collection

The researchers first requested permission by sending a letter to the College Dean outlining their study. Then, letters were sent to the school principal and the coordinator IPed requesting permission to conduct a study at the institution where the informants teach. Following approval from the authorities, the researchers approached the informants to ask for their consent to participate in the study and to confirm that the researchers were permitted to use their data. They were also provided with a data privacy letter that was signed by the researchers to ensure confidentiality to make sure that informants were aware of the nature of the study. In conducting the study, an in depth interview was utilized with the use of meticulous note-taking, audio recording, and soft wares like Microsoft Word & Excel to track the variations of responses.

2.5. Data analysis

This study used thematic analysis by Clarke and Braun (2012) to analyze data where the researcher's personal experience is essential for making meaning and understanding qualitative data patterns. This approach could help researchers find commonalities in the manner that a subject is discussed or written about and interpret them. Additionally, it would add precision and complexity and strengthen the overall meaning of the research (Alhojailan, 2012).

3. Results

Contextualized strategies are educational processes that connect to learning in a given environment, circumstance, or application area to target relevant, meaningful, and beneficial capabilities for all learners and assist them in deepening their comprehension of the subject matter (Amos, Folasayo & Oluwatoyin, 2015; Abad 2020). There were two themes that were identified as relating to the contextualized strategies of elementary teachers in teaching IP learners, namely integration of local materials and Glocal Approach.

3.1. Integration of Local Materials

This contextualized strategy exhibits the integration of local cultural material in teaching material developed for IP learners. This is divided into three sub-themes namely Reading materials, Modules, and Contextualized Storybooks:

- **Reading Materials:** Proficiency in reading is crucial for an IP learner the same goes for the other learners' academic performance since it enables them to access the full range of the curriculum and enhances their language and communication abilities.

Under this sub-theme lies a sub-category namely Reading Cut-outs.

Reading Cut-outs: Reading materials are cut and pasted into the learner's notebook as an actual activity and a homework assignment.

Ara: "gapadala man ko saila sang reading notes, mga simple lang bala."

Ara: "tapos may mga notebooks sandakaday a ngaginapatapikanko kang mga readings."

- **Modules:** A printed teaching resource teacher's use when a child's learning falls behind schedule due to circumstances such as recurrent absences because they need money to survive daily. Under this sub-theme lies the one sub-category namely Annotated PDF's.

Annotated PDF's: Giving them specific coursework ensures that they have the opportunity to continue their education despite the difficulties they are facing. This useful technology gradually remediates so that IP learners grasp the lesson at home while the teacher monitors their progress at school.

Chy: "Yung mga absences niyapinababol ko through modules."

Lyn: "Amo ray a eh tan-aning tana siguro remediations gd man kung may mga modules gina send mn namon kay ga dura tana or ga absent."

- **Contextualized Storybooks:** Students are provided with a critical chance to connect what they are learning to their personal experiences and the actual world, and to internalize it

in line with their current beliefs and ideas. It is essential to establish a learning environment where students may build their own intellectual grasp for the course material (Pinoliad, 2021). Under this sub-theme lies the sub-categories namely indigenized and manipulative.

Indigenized: This refers to the process of enhancing education by incorporating valuable indigenous knowledge, culture, beliefs, and traditions into course curricula, student services, and administration, among other things (Johnson & Segura, 2022).

Kris: “*May story akonga ga portray man sa source of living man nanda then para nga at least ang mga classmates nanda ma inchiindihannanda ang sitwasyon.*”

Manipulative: In education, manipulatives are tactile and visual aids used to help students understand a topic, which is a form of constructivism due to active learning (McCarthy, 2022).

○ Ara: “*Ginagamitnakonmakaisaambisa story ang bataambi IP tana, na include namon ka ja for example, “maybata ka ja ngalanyasiamoni, bata ka ja ka ati.”*”

3.2. Glocal Approach

This contextualized strategy focuses on blending and connecting local and global contexts when teaching and learning concepts that apply across different scale levels. This is divided into four sub-themes which are (1) Use of Springboard (2) Differentiated Instruction (3) One-on-one session (4) Equity Pedagogy:

- **Use of Springboard:** This provides standards-aligned lessons and assessments, as well as student-centered instruction, classroom-tested tools, and lessons and assessments. Under this sub-theme lies the sub-categories namely (1) Amalgamation, and (2) Meaning-Based.

Amalgamation: This refers to merging instruction and IP learners’ relatable contexts during class.

Kris: “*For example, ang springboard ko, sometimes ang springboard ko is about man sa mga Ati.*”

Meaning-Based: This ensures that adequate instructional time is devoted to teaching children how to read, think, write, and speak in all subject areas.

Kris: “*Pero sometimes may mga springboard kami nga stories or mga situations ngagina expose ang anda classmates saila culture para at least aware ang ilang mga classmates.*”

- **Differentiated Instruction:** Teachers modify their instruction and syllabus to ensure that all learners learn as much as possible. It’s also a framework that teachers can use to implement a variety of strategies, many of which are evidence-based (Tomlinson et al., 2003). Under this sub -theme lies the sub-category namely (1) Scaffolding.

Scaffolding: It is a process in which teachers provide specific help to learners while they learn and develop a new concept or ability. A teacher may convey new information or demonstrate how to address a problem using instructional scaffolding techniques (GCU, 2022).

Racqui: “*Sa pagtao sang exam, iba man ang exam sang mgabatanga below, below average, kag above average kay intelligence na ang (ano).*”

Racqui: “*Sa mga below, iba man ang strategies ngaginagamitnatonsaanda para maka check man kagmak-amaansanda.*”

- **One-on-one session:** This teaching technique is the most effective way to provide a student with a hands-on learning experience. They get the teacher’s complete attention, and teaching is personalized. The instruction is totally personalized for each student and learner-centered, allowing them to use their knowledge to enhance the learning objectives. Under this sub- theme lies the sub-category (1) Traditional Mentoring.

Traditional Mentoring: This describes an individual learning from and engaging with a teacher; with education adapted to the student’s own specific pace and learning needs. This is in contrast to a traditional classroom environment or a one-to-many experience with a single teacher instructing a big group of students (Ryan, 2022).

Ara: “*Gina taw-an ko sila time ngamagbubi, ga one-on-one gid ako mag pabasaginaamat-amat ko man kag ja tulad.*”

Ara: “*Pay mas nami kung ga reading ang batagina individual gid tana mong.*”

- **Equity Pedagogy:** It’s an approach to education in which teachers develop teaching strategies and cultivate classroom environments that better support all students, especially those who have been disadvantaged in school and outside society (Banks & Banks, 1995).

Under this sub-theme lies the sub-categories namely (1) Specificity, (2) Work-Integrated Learning, and (3) Empowering School Culture and Social Structure.

Specificity: Establishing one goal to every learner regarding its ethnicity, social affiliations, status and background. Teachers prefer curriculum objectives that are expressed in equitably general terms because they give the teacher a great deal of freedom in choosing the types of learning activities to use, the learning objectives to pursue during these activities, the assessment tasks to use at the end of the activity, and the level of student performance that defines a “successful” classroom learning activity (Church, 2010).

Kris: “*So ang number 1 nga strategy is gina adopt ko saila culture.*”

Ara: “*So, kung ano man nga strategy ngaginagamit ko saakonestudyante, amo ma ran saanda.*”

Work -Integrated Learning: It’s a well-theorized pedagogical practice that facilitates students’ learning through connecting or integrating experiences across academic and workplace contexts (Billett, 2009).

Chy: “*I’ve also integrated some of the lessons related to the IPs, I set an example to the children.*”

Lyn: “*In terms of the needs of individuals? wara kami it mga special exams para kana.*”

Empowering School Culture and Social Structure: When the school’s culture and organization are modified in ways that allow learners from different racial, ethnic, and gender groupings to feel equality and equal standing (Banks, 1995).

Lyn: “*nag start tana as a regular class, kung ano strategy ang nagamitnamonsa regular class, amo mn lng gid ra.*”

Jho: “*Ang strategies same man samgakabataanngaindi IP kay ano man ang kinalainniladiba? Ang ila color [ma lang].*”

Ara: “*Way ko ma siya gina pain kay as one mandyapon ang paglantam*”.

4. Discussion

Contextualized strategies are educational processes that connect to learning in a given environment, circumstance, or application area to target relevant, meaningful, and beneficial capabilities for all learners (Abad, 2020). Two significant themes were identified as relating to the contextualized strategies of elementary teachers in teaching IP learners, namely integration of local materials and Glocal Approach. A study by Perin (2011) discovered that by adopting an actual-life scenario, contextualized instructions can improve low-skilled students’ academic achievement and long-term college advancement.

This study revealed that Reading materials enables students to access the full range of the curriculum and enhance their language and communication abilities. In making use of reading materials, reading cut-outs are utilized which are cut and pasted into the learner’s notebook as an activity and homework assignment. The study by Estuarso et al., (2016) claims that 61% of students believed that reading books about their local culture was necessary as learning source materials. Moreover, Wulandari et al., (2018) also suggests that the use of local cultural reading materials in teaching is beneficial; however, it is difficult due to limited availability. Utilization of modules were given to the IP learners as an ordered collection of topic-relevant information meant to teach a subject or skill. Nambiar et al. (2020) and Betlen (2021) both found that the modular teaching approach was superior to the traditional teaching method in their study of the effective learning strategy for secondary school pupils. They feature annotated PDFs, allowing instructors and students to access the content, print it off, or produce it for use at home. This strategy can assist students in improving their learning capacity and making it simpler for them to read self-study materials. However, Nambiar et al. (2020) argues that non-native instructors in the state were concerned about not knowing enough about the local culture to manage many themes in class. To avoid appearing incompetent, they decided not to teach these things.

Following are contextualized storybooks enables students to connect learning to their personal experiences and the world. It allows them to understand in accordance with their values and ideals. Similarly, it improved students’ motivation to learn and read (Villacorte, 2022). In contrast, Adichie (2009) argued that telling a single story about a group of individuals dehumanizes them and makes it harder to see equal humanity in all of the characters. To amplify, embracing diversity and tolerating cultural differences are important, but they cannot help students achieve knowledge, empathy, and cultural responsiveness (Ferris, 2020).

Correspondingly, manipulatives are visual aids used to help students understand a topic, while indigenous is the process of infusing indigenous knowledge, culture, beliefs, and traditions into education. Hence, these contextualized storybooks were used to communicate indigenous information, such as the introducing the IP's culture and the way of life.

Moreover, our study found out that the Use of Springboard provides standards aligned lessons and assessments, as well as student-centered instruction, classroom-tested tools, and lessons and assessments. Amalgamation and Meaning-Based are the sub categories that fall under this sub-theme. While Meaning-Based assures that sufficient instructional time is allocated to teaching students how to read, think, write, and speak in all subject areas, amalgamation refers to the merging of instruction with IP learners' related settings during class. In a study conducted by Roehr (2012), it was found out that the majority of the learners who adopted the springboard instructions expressed satisfaction with their academic proficiency, indicating a positive attitude towards learning.

It's also noteworthy that teachers used Differentiated Instructions to implement variety of strategies towards both IP learners. On the basis of a study by West (2013), differentiated instruction is a culturally responsive strategy that recognizes that learners may succeed in the classroom when their culture, language, background, and experiences are respected and used to support their learning and growth. Meanwhile, she also found that Indigenous learners are substantially over represented in special education due to poverty and systemic prejudice. To address this issue, scaffolding is being utilized wherein teachers provide specific help to learners while they learn and develop a new concept or ability.

Our study found out that one-on-one sessions are an effective way to provide an IP learner with a hands-on learning experience. Wisniewska (2019) asserts that one-on-one sessions allow teachers to get to know their students and develop lessons tailored to their needs and preferences. However, Meldrum and Clandfield (2016) argued that one-on-one sessions may not be enough time for solo study and learners may not experience the same sink in time as if they were around other people. Traditional Mentoring was implemented to contrast traditional classroom environment or a one-to-many experience with a single teacher instructing a big group of students.

Moreover, our study found out that teachers imply Equity Pedagogy as an approach to education in which teachers develop teaching strategies and cultivate classroom environments that better support all students, especially those who have been disadvantaged. A study conducted by Qualla (2022) asserts that representation counts and has an impact on learners' feelings of belonging in academic subjects, divisions, and programs by implementing inclusive pedagogical techniques in the classroom and highlighting the views of everyone regardless of its ethnicity and status quo. Work-Integrated learning is utilized in facilitating learners' learning through connecting or integrating experiences across academic and workplace contexts. The school's culture and organization are modified to allow learners from different racial, ethnic, and gender groupings to feel equality and equal standing. Exploring the contextualized strategies employed by elementary school teachers reveals that the teaching approaches they used are relevant to all learners, regardless of their cultural origins. They have devised methods to support every child's learning process, but in a way that is equitable and tailored to the needs of each learner.

This study has several limitations that should be addressed in future studies. Firstly, only six informants were qualified to the inclusion criteria being set by the researchers. Secondly, this study only focuses on elementary school teachers who utilize contextualized strategies in teaching IP learners. Thirdly, our findings are generated within a general context on contextualized strategies of elementary teachers in teaching IP learners. Fourthly, our study used self-report questionnaires and may be subject to self-report bias. Despite these limitations, this research generated additional information on the contextualized strategies of elementary teachers in teaching IP learners.

5. Conclusions

Teaching Indigenous Peoples requires a thoughtful, culturally sensitive approach that recognizes and respects their unique histories, languages, cultures, and worldviews. Contextualized teaching strategies are essential for creating a warm and productive learning environment. Indigenous communities are distinct, and teaching strategies should be tailored to the students' specific cultural contexts and needs. Building relationships and trust with students

and their communities is essential for successful Indigenous teaching and learning experiences.

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Research Article

A Proposed model for Decongesting Correctional Facilities in Edo State

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Abstract: There are three correctional centers in Edo state: Oko, Ozalla, and Ubiaja are used as case studies in this study, which focuses on the challenges of decongesting the country's jail system. The objective of the study was to develop a model to aid in ranking and recommending inmates based on an acquittal likelihood factor who should be fast-tracked for a speedy trial, bail, or relocation/recommendation for other correctional techniques or facilities within the Nigerian legal system; aside from the prison. The paper presents a model for a decision support system that incorporates three multi-criteria decision making systems, SAW, TOPSIS, and AHP, as well as six factors: those who are awaiting trial, detained, sentenced to life, condemned inmates, long-term offenders, and those who have received only a light sentence. While assigning weights to rank the prisoners, consider their dependency, age, gender, health status, and percentage of their sentence served. Experts, including two magistrates, ten prison wardens, five attorneys, ten convicts, six pastors, and nine NGO employees, engaged in a questionnaire poll to predetermine weights. The model offers the decision maker two different levels of guidance, namely (a) a beginner mode and (b) an expert mode. The beginner mode is intended for decision-makers who are not familiar with the multi-criteria process. The advanced mode is employed when the decision-maker is conversant with the MA method and can choose a particular method using the predefined weights.

Keywords: acquittal likelihood, SAW, TOPSIS, correctional facilities, trial

1. Introduction

A correctional facility, prison, penitentiary, or is a place where people are physically confined or interned and usually have a limited amount of personal freedom. Prisons are typically institutions that are part of a country's criminal justice system, so that imprisonment or incarceration is a legal penalty that the state may inflict for the commission of a crime. Overcrowding happens in Nigerian prisons when the number of detainees exceeds prison capacity to the point where inmates cannot be accommodated in a humane, healthy, and psychologically safe manner. Overcrowding is commonly referred to as congestion in Nigeria (Ehonwa & Odinkalu, 1991). It is a significant challenge in Nigerian prisons, particularly those located in major cities. The number of cells in these jails in Nigeria can be double or triple their intended number (Cox et al., 1984). Prisoners scarcely have enough room in these cells to move their bodies or limbs freely. Each prisoner in this regime is given a "post", or roughly a foot and a half-square space. The majority of prisons in Nigeria is jam-packed and overcrowded, which poses significant challenges for the reformation (Crystal, 2004), rehabilitation, and reintegration processes involved in prison administration. Despite an alarming rise in the jail population over the previous two decades, Nigerian prisons have essentially maintained their capacity.

Prior to Nigeria's independence in 1960, these jails were constructed by the colonial government and local authorities. The status of these jails is alarmingly deplorable, with little feeling of upkeep or repair indicative of long-term neglect by the Nigerian government. The majority of the prisons built during this time period are actually quite old, in poor condition, and in danger of collapsing. According to Aduba (1993), the entire jail capacity from 1978 to 1981 was 27,257, while statistics from (Nigeria prison services, 1978–1981) show that the

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average monthly population in 1978 was 32,332; in 1979 it was 34,770; in 1980 it was 35,332; and in 1981 it was 38,477. 18.61% were overcrowded in 1978, 27.56% in 1979, 29.43% in 1980, and 41.16% in 1981. Currently, 49,000 people are housed in Nigerian prisons, with 20% of them being offenders and the remainder being awaiting trial (Amnesty International, 2012).

2. Problem of the Study

The ability to store and retrieve information rapidly has reduced the complexity of work and information, which is one of the uses or advantages of computers. There is a need for a decision support system that is computer based to implement rules for choosing and recommending an inmate with a higher probability of acquittal when developing strategies for prison decongestion in view of selecting inmates with a greater likelihood for discharge or bail, such as those awaiting trials, detainees, pregnant women, and the terminally ill.

Aims and objectives of the research

The purpose of this study is to propose a model that aids prison administrators and staff in compiling a list of the prisoners most likely to be granted acquittals, bail, parole, or pardons/mercy.

Objectives of the research:

- a) to investigate the criteria for choosing inmates for a trial or amnesty program;
- b) to gather opinions and information from those with experience working with prisoners, including warders, inmates, attorneys, and members of non-governmental organizations (NGOs) like the Christian Fellowship;
- c) to propose a relevant model for decongesting correctional facilities in Edo state.

Significance of the research

This research would be useful to prison managers and other stakeholders in developing a model for decongesting correctional centers. It would also increase concern and knowledge about the problem of overcrowding in Nigerian prisons. The proposed model will also necessitate the documentation of jail records in a format that can be accessed via computer systems and networks

3. Literature Review

Several reasons have been recognized as contributing to jail overpopulation in other countries (Coyle, 2002). For example, (Agomoh et al., 2001) listed the following: High remand / awaiting trial population; judicial overuse of jail; police abuse of arrest authority and bail terms; Inadequate legal aid facilities; Transportation problems for defendants to court; Inadequacy in jail structures; Inadequate use of non-custodial disposition measures; and Corruption. In addition, the writers considered the following consequences on the jail population and reforms: Inhumane treatment of inmates (including health and welfare facilities); Inadequate juvenile justice system; Poor treatment of women; poor treatment of mentally sick convicts; Inadequate coordination and preparation with the judicial sector; insufficient funds and other administrative hurdles; and insufficient community participation in the administration of justice.

Officials from the Nigerian correctional centers have claimed that many occurrences of overcrowding occur in prisons located in urban areas. Analyzing records from 30 Nigerian prisons (out of over 200), it was discovered that 30 prisons accounted for 22,609 (almost 50 %) of the national jail inmate population, with 16,422,609 of this amount awaiting trials (Agomoh et al., 2001).

Additionally, there are situations where a sizable proportion of people who are being held in custody are classified as “civil or criminal lunatics”. For instance, in 2008, there were 860 people incarcerated in Enugu Prison, of whom 157 were convicted criminals, 598 were awaiting trial, and 105 were mentally ill (Agomoh et al., 2009). It can be concluded from this that 12.2 % of all inmates in this particular institution were mentally ill. Given that most of them are awaiting trial/remand inmates, adding the number of mentally ill inmates to the awaiting trial figure results in a total of 703 out of the total population of 860 being awaiting trial, with mentally ill inmates making up 14.9 % of the total number of non-convicted inmates in the prison. It leaves a lot to be desired when one considers that the majority of mentally ill people are classified as “civil lunatics” who are jailed solely due to their mental condition rather than the fact that they have committed any crimes (Ghasemzadeh & Archer,

2000). This frequently occurs because their family members are ashamed of their condition, incapable of paying for their adequate care in a psychiatric hospital or therapy setting, or both. They believe that by placing them behind bars, the government and Nigerian Prison Service will be forced to give them free housing, food, and (if they're lucky) even medication. Additionally, by removing the person from public view and the community, their family is protected from shame and stigma. Therefore, the question is if these individuals shouldn't be directed to appropriate therapeutic settings in order to relieve the Nigerian prison system of this unjustified strain and stress. The practice of imprisoning people with mental illnesses poses important issues, according to Agomoh (2007; 2008), who wrote on defending the human rights of inmates with mental health disabilities in African jails. It is questioned why people are imprisoned. Such actions also put the state's stance on human rights and the standard of its health care delivery in jeopardy.

4. Materials and Methods

The research method used to obtain the essential data needed as input into the proposed model is a quantitative methodology that includes elements of the qualitative approach.

4.1. Design of the study

The descriptive survey research design was chosen for the study. This method aims to define potential behavior, attitudes, values, and traits. To obtain the weight ratings of the selected acquittal likelihood criteria for the prisoners, a descriptive survey research technique was used.

4.2. Acquittal likelihood criteria

The best acquittal criteria were determined to be the following:

Status: The terms "Awaiting Trial Males" (ATM), "Awaiting Trial Females" (ATF), "Convicted Males" (CM), "Convicted Females" (CF), "Detained at His Excellences Pleasure" (Underage detainees in prison with special authorization), "Debtors", "Criminal Lunatics" (Mentally ill persons charged with an offense), and "Civil Lunatics" (Mentally ill persons) charged age, sex, and the percentage of the sentence that has already passed, as well as any health issues or pregnancy (Deng & Wibowo, 2004).

A questionnaire survey was used to carry out the descriptive study design. Because it assisted in gathering information and opinions from the stakeholders, this design is appropriate for this study.

4.3. Sample and sampling techniques

The non-probabilistic sampling technique will be used for the study. To pick the experts, participants or respondents would be sampled on purpose.

4.4. Research instrument

A questionnaire titled "Weighing Criteria for Acquittal Likelihood (WCAL)" was used to collect the data. The questionnaire is divided into two portions, A and B. Section A includes items pertaining to respondents' personal information. Section B is made up of ranking scales utilizing the Likert scale of 1-5 for each of the six factors considered.

4.5. Data collection

The researcher and two research assistants were briefed on the goal of the study and how to administer the questionnaires. The surveys were provided to the respondents and were promptly retrieved after completed.

4.6. Data analysis

Descriptive statistics were used to assess the data that were collected. A mean value of 2.50 or more is considered to have a high degree of influence, while scores below that were considered to have a low degree of influence on the decision point. The association between marital crisis severity and study habit inventory results (rated as poor, fair, average, good, and very good) will be evaluated using partial correlation.

5. Results and Discussion

This section contains the survey results, as well as an analysis and discussion of the findings.

5.1. Results of the survey analysis

a) Oko Correctional Center

Table 1 shows the analysis of capacity and list of prisoners in Oko Correctional Center.

Table 1. Capacity and list of prisoners in Oko Correctional Center

Status	Male	Female
Condemned inmate	20	5
Lifer	19	8
Long-sentenced	112	34
Short-sentenced	289	87
Detainee	79	23
Awaiting trial	45	17

Figure 1 represents the statuses of the inmates in Oko Correctional Center.

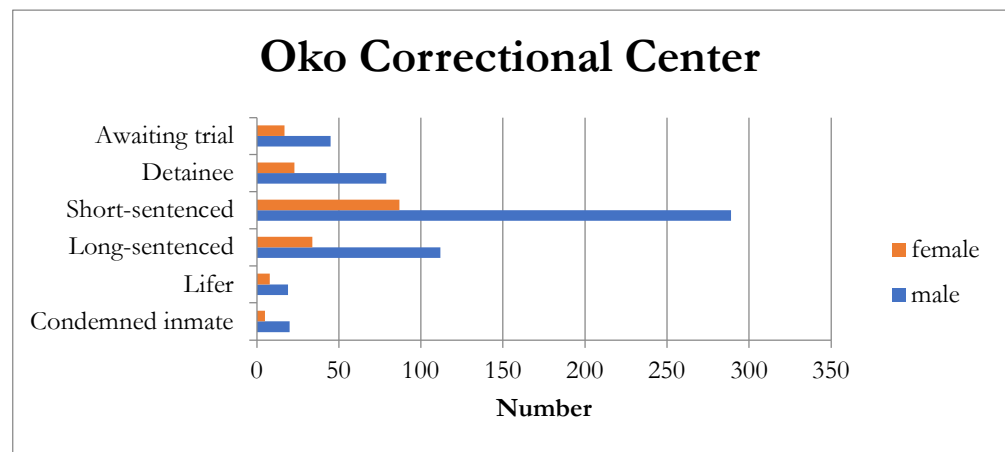


Figure 1. Status of the inmates in Oko Correctional Center

b) Ubiaja Correctional Center

Table 2 shows the analysis of capacity and list of prisoners in Ubiaja Correctional Center.

Table 2. Capacity and list of prisons in Ubiaja Correctional Center

Status	Male	Female
Condemned inmate	14	2
Lifer	11	3
Long-sentenced	82	14
Short-sentenced	209	61
Detainee	29	11
Awaiting trial	32	14

Figure 2 analyses the statuses of the inmates in Ubiaja Correctional Center.

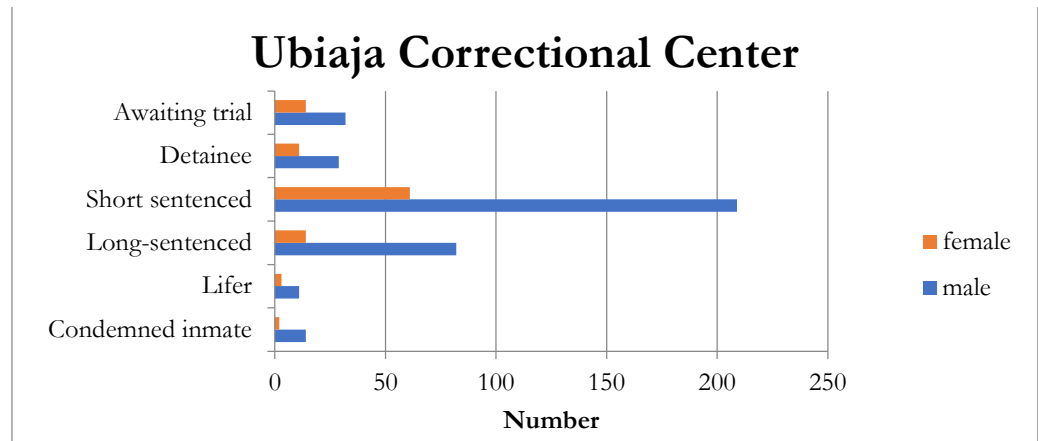


Figure 2. Status of the inmates at Ubiaja Correctional Center

c) Ozalla Correctional Center

Table 3 shows the analysis of capacity and list of prisoners in Ozalla Correctional Center.

Table 3. Capacity and list of prisons in Ozalla Correctional Center

Status	Male	Female
Condemned inmate	1	0
Lifer	2	1
Long-sentenced	54	22
Short-sentenced	76	32
Detainee	-	-
Awaiting trial	2	2

Figure 2 shows the analysis of the statuses of the inmates in Ubiaja Correctional Center.

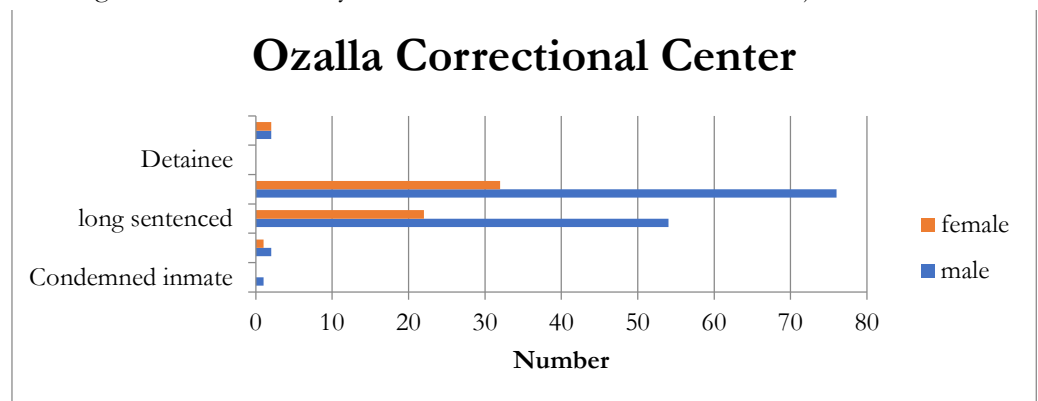


Figure 3. Status of the inmates at Ozalla Correctional Center

5.2. The proposed model framework

It is not only desirable but also crucial to implement a model to address the prison overcrowding issue. By enabling them to interact with the system and exchange information with it, the proposed model gives the decision maker efficient tools to better grasp the choice problem and the effects of their decision-making behaviors on the business. The model must be effective, efficient, and adaptable in order to properly resolve the general IS project selection problem due to the diversity and complexity of the selection criteria, their interrelationships, and the volume of information. The decongestion strategy for prisons is presented in this section. The model was created to assist the decision maker in selecting the best inmate in a simple and straightforward manner by allowing the decision maker to input values to

express his or her requirements and to fully explore the relationships between the criteria, the alternatives, the methods available, and the outcome of the selection process (Chen & Hwang, 1992). The proposed model will assist the decision maker in adopting a problem-oriented approach to problem solving through an interactive information exchange between the two parties. In this process, the model lets the problem it is attempting to solve define the best strategy to use. This solution-focused approach is essential for tackling the IS project evaluation and selection issue in a company effectively and quickly.

The proposed model is composed of three major subsystems:

- (a) The dialogue subsystem.
- (b) The input management subsystem.
- (c) The knowledge management subsystem.

The conversation subsystem is responsible for user-friendly communications between the model and the decision maker as well as integrating several other subsystems. All operations or directives selected by the decision maker are coordinated by the subsystem. The interface enables the decision maker to change or visualize the data as well as apply one of the available MA algorithms.

The interface is created to give the decision maker flexibility to customize the system; the decision maker can define the criteria he or she wants to ask about as well as add, remove, or edit criteria. In order to analyze various possibilities utilizing the knowledge management subsystem, a decision maker uses the database through the dialogue subsystem. The IS project assessment and selection problem is solved by the input management subsystem, which organizes and controls all of the inputs.

Typically, each challenge has a different set of required data inputs, both in terms of type and number. Primary and secondary types of these input data are distinguishable (Bastos et al., 2005)

The choices, the criteria, the decision matrix, and the pairwise comparison matrices make up the main input data. The weightings for the criteria are part of the secondary data. The input data are entered into the system for processing, and once they are there, they can also be changed. Due to the potential inclusion of additional MA methods in the proposed model, it should be highlighted that the system is adaptable enough to support the incorporation of new data types (Atsenwa, 2007). All of the MA methods offered by the model are managed via the knowledge management subsystem. Six MA methods have been included in the proposed model for the purpose of explaining it, to aid the decision maker in choosing the best MA method to address a particular IS project assessment and selection problem.

These three techniques include:

1. Simple Additive Weighting (SAW) method
2. Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method
3. Analytical Hierarchy Process (AHP) method and additional techniques.

The decision maker may directly use one of these MA techniques or the suggested model may automatically choose one of them using the knowledge management subsystem. The proposed model is divided into six phases: (a) identification of decision maker requirements; (b) determination of criteria weights; (c) determination of performance ratings of alternative IS projects with respect to each criterion; (d) choice of the best MA method; (e) assessment of the IS project; and (f) choice of the appropriate IS project alternative. The proposed model framework for tackling the problem is depicted in Figure 4.

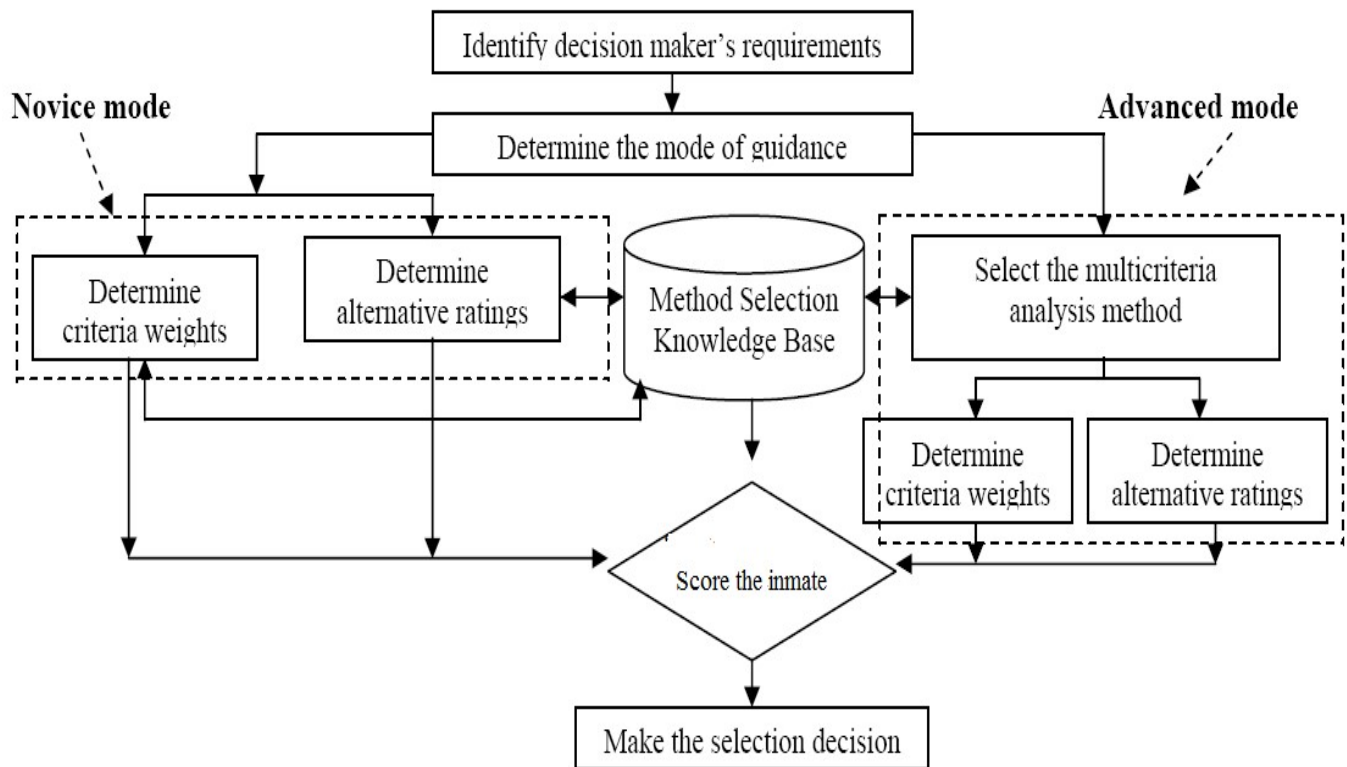


Figure 4. Proposed models for choosing an inmate with a high possibility of being found not guilty. Source: Oise Godfrey, 2019.

When evaluating and choosing IS projects, the initial phase begins with the identification of the decision maker's requirements. Among these conditions are (a) the decision maker's preference for a particular MA method, (b) the decision maker's availability of time, (c) the decision maker's desire to interact with the system, and (d) the desire to allow the system to choose one satisfactory solution or for the decision maker to choose the best solution. The proposed model offers the decision maker two different levels of guidance, namely (a) a beginner mode and (b) an expert mode. For a decision-maker who is not familiar with the MA process, the beginner mode is created. In the beginner's mode, the decision-maker is first questioned by the knowledge management subsystem about the nature of the issue and the ideal kind of solution. When the decision maker is knowledgeable about MA approaches and competent to choose a certain method, they employ the advanced mode. The identification of fundamental criteria weights in a particular choice circumstance is the next step in the second phase. The decision maker may use predetermined weights set by experts to establish the basic criteria weights using the model user interface.

The knowledge base uses the verbal phrases in the universe $U = \text{"Very high extent", "High extent", "Medium extent", "Low extent", and "Very low extent"}$. Following the quantitative scaling on the 6 components from a database, the performance ratings of alternative inmates with regard to the acquittal criteria will be determined. Practically, the criteria may contain both quantitative and qualitative variables that meet the needs of the decision-maker and, depending on the MA employed, result in a ranking of the inmates.

5.3. Results of the statistical analysis for the expert system of the weighting criteria

The Relative Rank, which is likewise a relative measure of perception, goes from 0.2 (the lowest ranking index) to 1.0 (the highest ranking index, or 1/5). Table 4 displays the weightings W_i and ranks based on W_i values for all selection qualities, with a minimum value of $(IR = 0.2 + RR = 0.2)/2 = 0.2$ and a maximum level of importance index of 1. The table displays status, percentage of sentence served, dependency ($W_i = 0.8$), whereas health/pregnancy ($W_i = 0.6$), age ($W_i = 0.4$), and gender ($W_i = 0.3$).

Table 4. Weights of the different factors

Category	Scale	Frequency	Median	IR	Importance of criteria	RR	Weight	Rank
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	1	1	4	0.8	4	0.8	
	2	3					
	3	3					
	4	12					
Status	5	23				0.8	1
	1	0	5	1	3	0.6	
	2	4					
	3	7					
	4	7					
Fraction of sentence	5	24				0.8	1
	1	7	3	0.6	3	0.6	
	2	9					
	3	10					
Health	4	12					
Condition/Pregnancy	5	4				0.6	2
	1	13	2	0.4	2	0.4	
	2	10					
	3	4					
	4	7					
Age	5	8				0.4	3
	1	11	2	0.4	1	0.2	
	2	21					
	3	4					
	4	3					
Gender	5	1				0.3	4
	1	0	5	1	3	0.6	
	2	6					
	3	4					
	4	10					
Dependency	5	22				0.8	1

Further let's analyse the examples of ratings for inmates using the Simple additive weighing method (SAW) (Table 5 and 6).

Table 5. Paul Osakpamwan

Category	Value	Scale	$W_i * Score$
			1
			2
			3
			4
Status	Awaiting trial	✓	5
		✓	1
			2
			3
			4
Fraction of sentence served	3 out of 24 yrs		5



		✓	1	0.6
			2	
			3	
			4	
Health Condition/Pregnancy	Very Healthy		5	
			1	
			2	
		✓	3	1.2
			4	
Age	54		5	
		✓	1	0.3
Gender	Male		2	
			1	
			2	
			3	
			4	
Dependency	Not applicable		5	
Total acquittal likelihood factor				6.9

Table 6. Josephine Amadi

Category	Value	Scale		$W_i * Score$
			1	
		✓	2	1.6
			3	
			4	
Status	<i>Short sentence</i>		5	
			1	
			2	
			3	
		✓	4	2.4
Fraction of sentence served	<i>10 out of 15 yrs</i>		5	
		✓	1	
			2	1.2
			3	
			4	
Health Condition/Pregnancy	<i>Healthy</i>		5	
			1	
		✓	2	0.8
			3	
			4	
Age	42		5	
			1	
Gender	<i>Female</i>	✓	2	0.6

		1
		2
		3
		4
Dependency	<i>Not applicable</i>	5
Total acquittal likelihood factor		6.6

Based on the results shown above for two detainees, the decision ranking using the SAW technique yields a ranking of acquittal likelihood of 6.9 for Paul Osakpamwan and a score of 6.6 for Josephine Amadi, implying that Josephine Amadi has a lesser score in comparison. It should be emphasized that the ratings for a given convict are expected to rise over time.

6. Conclusions

This study examines three correctional centers in Edo state (Oko, Ozalla, and Ubiaja correctional centers as case studies) to examine the issue of decongesting the Nigerian prison system. The proposed model goal is to rank and recommend prisoners who should be given priority for a rapid trial, bail, or transportation to another correctional facility or manner in accordance with Nigerian legal guidelines. The model offers the decision maker two types of guidance: (a) a beginner mode, and (b) an advanced mode. A decision maker who is not familiar with the MA methodology should use the beginner mode. The knowledge management subsystem first questions the decision maker in beginner mode about the features of the problem and the sort of solution desired. The advanced mode is utilized when the decision maker is conversant with MA methods and can select a specific approach based on the pre-determined weights.

7. Implications

Applying the proposed model to efficiently address the prison overcrowding issue is not only desirable, but also crucial; as the model gives the decision maker efficient mechanisms to better understand the decision problem and the implications of their decision behaviors to the prison system by enabling them to interact with the system and exchange information with it. As a result, it is advised that the Nigerian correctional centers adopt such a decision-making method.

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Research Article

The standard measurement in online learning: a rubric as a focus on teaching-learning practices to move up quality education

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Abstract: The main objective of this paper is to facilitate the 21st century's quality assurance for learning and distance learning to measure learning outcomes and enable students to achieve skills and knowledge in global transformative education. Technologies in education have provided a common platform for transforming education into online learning practices throughout the global COVID-19 affliction. Accordingly, the transformation of modern technologies in education has opened up many challenges and reliability issues in teaching and learning processes. The paper highlights the rethinking of rubric perceptions, uses, and design in learning, including online learning, in an interactive way to promote quality education. The research methodology involved a systematic review of the literature and data analysis synthesized using both qualitative and quantitative techniques. Rubrics, as an influential assessment instrument in learning, have been applied along with standardizing the quality of students in higher education for almost three decades globally. This study is significant in focusing on the rubric, the practical instrument, which is helpful for great accomplishments and challenging skills, and creativity in tertiary education. Well-designed and carefully designed rubrics and e-rubrics help students become more rational judges of the quality of their work by identifying the essential criteria and targeting the goals and learning outcomes of education. Rubrics enhance students' competency to communicate their ideas effectively, which correlates with the standard of sustainable quality education. Further examination of the rubric is needed to identify the challenges of reliability and authenticity in digital education.

Keywords: rubric, online education, quality education, transformative education, rubric design, online assessment

1. Introduction

This paper aims to improve quality assurance in distance learning for the twenty-first century by using rubrics for practical skills and creativity to evaluate student outcomes and empower them in global transformative education. The purpose of education in the twenty-first century is to provide students with the knowledge and confidence they need to use their skills in the real world. Due to the wealth of information at their disposal, 21st-century skills place a greater emphasis on comprehending, communicating, and successfully using the information (Education in the 21st Century, 2022). The COVID-19 pandemic has led to a rapid shift to digital learning in higher education worldwide which has interrupted training and education (5 Reasons Why, 2023). Online education has replaced traditional classroom instruction, requiring academic institutions to adapt to unforeseen disasters (Almahasees et al., 2021). The internet and new technology have significantly altered traditional education, with the epidemic expected to accelerate technical advancement and digital transformation by 2020 (Krishnamurthy, 2020). Before the COVID-19 pandemic, social meetings in educational institutions were seen as potential viral promotion opportunities. Traditional methods were replaced with online instruction, but e-learning remains the best option due to its spatial distance, despite potential challenges and student dissatisfaction. (Lizzano et al., 2020). This essay aims to highlight the value of using rubrics as an efficient tool for online learning in Bangladeshi higher education.

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1.1. The advantages of online and distance learning

The COVID-19 pandemic led to the replacement of traditional approaches with online learning, as social gatherings were believed to be opportunities for virus spread (Maatuk et al., 2022). According to Aboagy et al. (2020), it is a formal educational system that uses electronic resources and permits instruction to occur inside or outside of the classroom (Maatuk et al., 2022). Online distance learning offers students access to high-quality education anytime and anywhere, transforming the educational system and accelerating the digital transformation (García-Morales et al., 2021). Despite challenges, online learning remains the best alternative to prevent disease spread as it guarantees spatial distance. Online education programs are at the forefront of the stage, enabling continued learning and development of 21st-century skills in the young generation. (Allen & Seaman, 2013; Everhart et al., 2016; Morcke et al., 2013; NCES, 2016). Despite challenges, online learning remains the best alternative to prevent disease spread as it guarantees spatial distance.

1.2. Assessment in Distance and Online Education

Assessment is the source of value for every instructional system: what is evaluated in a course or program is typically linked to value, and what is valued becomes the activity's main focus (Swan et al., 2012). In the contemporary epidemic, various online teaching and assessment systems have emerged and are successful. The evaluation process is extremely important because it marks the end of the entire educational process (García-Morales et al., 2021).

Researchers and educators have researched assessment in online pedagogy with an emphasis on the outcomes' measurability for legitimacy and accreditation. New assessment techniques and unfamiliar materials are part of the change to online delivery (Bauer & Anderson, 2000; Hartley & Collins-Brown, 1999). Online tests may increase pedagogy and organizational efficiency, according to current theory. The goal and type of the assessment determine the website and course(s) that will be hosted as part of a student-centered, technology-mediated learning and teaching approach. Asynchronous, interactive learning is provided by online delivery, which has advantages for both students and academics (Hricko & Howell, 2006; O'Rourke 2010). Assessment is both formative and summative, hence assessment practices must be created in a way that takes this into account. Assessment is not simply a measurement of the student's "tank of acquired knowledge". The online environment is ideal for this type of assessment because it is relatively simple to give students access to a variety of self-assessments and because students can take formative assessments in their own time without elaborate security or the need for invigilation (Dennick et al., 2009). Formative assessment involves assessing students directly in the context of their learning to give them feedback on their progress. The differences between formative and summative assessment and conventional offline approaches present difficulties for scholarship and practice. Different terminologies, such as online learning, e-learning, virtual learning, networked learning, web-based and computer-mediated learning, and technology-assisted distance learning, have complicated the evolution of online learning (Barker 1999; Goodyear 2002; Graham et al., 1999; MacDonald 2002; Twigg 2001). The technological transformation of education requires significant changes in teaching methodology, fundamental competencies, and evaluation systems (Jensen, 2019). Universities in virtual environments must transition from lecture-based learning to problem-based learning, involving students actively (Marinoni et al., 2020). This shift will significantly impact the learning process, requiring a reevaluation of students' skills and competencies as well as methods for assessing learning outcomes (Jensen, 2019).

1.3. Challenges and reliability issues in distance, and online learning assessment

According to several theories in the literature, cheating, and plagiarism are intrinsically more likely when delivered online. The challenges of online learning include issues with user trustworthiness and the security of online learning programs, in addition to other challenges that are always connected to the misuse of technology and online examinations may solely feature objective questions (Gautam, 2020; Mukhtar et al., 2020).

There are other problems with the online tests, which might only contain objective questions, and further, they challenge the other testing methods and reliability issues in transformative and online education. It is more challenging to obtain valid assessment measures in an online, asynchronous course if the instructor and students do not interact face-to-face. Other creative ways of evaluating the success of student learning outcomes must be considered if exam proctoring is not a possibility (Arnold, 2012). Two of the most prevalent and contentious problems in literature are cheating and plagiarism. While plagiarism is defined as “the reproduction and presentation of others’ work, without acknowledgment, or the attempt to receive credit for the ideas or words of others”, “cheating refers to “all dishonest and unauthorized actions” on the part of students (Hricko & Howell, 2006, p. 25 & p. 27). Due to the lack of in-person interaction between students and teachers, assessing students’ motives for online learning can be difficult. Online tests have problems with user security, reliability, and technological abuse, which reduces their effectiveness and trustworthiness. These problems add to the possible dangers of online learning (Gautam, 2020; Mukhtar et al., 2020). Distance and online education demand significant control over learning, making it challenging for teachers and universities to assess outcomes. Examiners verify task authenticity and academic integrity using technologies, time constraints, anti-plagiarism systems, and creative tasks. University professors play a dual role as examiners and administrators, ensuring student work accuracy and academic integrity (Melnychenko & Zheliaskova, 2021).

Universities should promote participation, fact-based decision-making, and transparent evaluation of results to transition from outdated systems. According to Sim et al. (2001), the paradigm shift in education over the past ten years has incorporated both pedagogy (moving from instructive to constructivist) and technology (moving from classroom to online). There are some "must haves" for successful online evaluations, including but not limited to the following: Assessment tools should match the delivery method, which is becoming more learner-centered. Simply moving assessment tools from traditional modes to online doesn't guarantee that students will be able to demonstrate learning or that examiner will be able to confirm that they have accomplished course objectives, according to Drummond (2003).

2. Research Focus

2.1. *Assessment Tool Rubric is the highlight*

Rubrics are an essential teaching tool for all instructors, but they are crucial for online courses in particular. By creating rubrics that specify the various levels of student success, instructors may grade assignments more swiftly and simply. They can use these tools to better communicate expectations, increase involvement, and foster self-evaluation (The Benefits of Rubrics, 2016) Rubrics have been introduced into many, if not most, online courses as a result of the rise in online education. But the Quality Matters online guidelines (Pollacia & McCallister, 2009; Sener, 2006) and the best practice recommendations for enhancing student assessment (Grant & Thornton, 2007) both stipulate the use of rubrics. In addition to learning assessment, the paper highly recommends the use of rubric aspects that facilitate problems and reliability issues in online and transformative learning. Rubrics have been a crucial assessment tool in higher education for over three decades, standardizing student performance (Dirlam & Byrne, 1978; Popham, 1997).

This study focuses on rubrics, which help students develop skills, creativity, and success in tertiary education, to identify authenticity and dependability issues in digital education. By highlighting essential criteria and educational objectives, rubrics help students develop logical judgments and improve communication skills. The rubric’ emphasis on giving feedback while skills are being developed rather than giving a mark as a representation of knowledge acquired causes assessment procedures to change used a rubric to evaluate the student’s mastery of these higher-order cognitive skills. Students’ scores increased 3.5 times over their pre-rubric performance after the implementation of this rubric (Kelly-Riley et al., 2001).

2.2. *The benefits of using rubrics in online assessment*

According to Allen and Tanner (2006), Ragupathi and Lee (2020), a well-crafted rubric provides a clear framework for activities, expectations, and emphasizes specific elements. It is essential for teaching and learning, as it encourages self-evaluation, improves peer and self-review analysis, and enables faster assignment grading and identifying weak areas. Teachers can use rubrics for teaching opportunities and feedback.

1. A well-crafted rubric communicates educational objectives, making evaluation procedures flawless, impartial, and consistent (Wolf & Stevens, 2007). It helps students become logical judges of work quality and is helpful for teachers in assessment by providing fair grading, feedback, and challenging work (Andrade, 2005; Guskey, 2003).

2. According to Moskal (2000), rubrics eliminate subjectivity in impression marking, promoting rational, objective scoring, increased consistency, valid judgment of complex competencies, and learning promotion (Jonsson & Svingby, 2007).

3. Rubrics are essential for higher education institutions to transition from traditional evaluation processes to competency-based, authentic assessment (Chowdhury, 2019; Dochy et al., 2006; Suskie, 2018). They provide benefits in understanding learners' advantages and disadvantages, and align with specific learning goals and competency level (Guskey, 2003).

4. Rubrics provide specific criteria for individual student learning outcomes, aiding the OBE process and enhancing online learning (Gupta & Gupta, 2021). Contemporary digital rubrics enhance interaction, improve teaching-learning processes, and meet global standards for high-quality education (Menéndez-Varela & Gregori-Giralt, 2016; Moril et al., 2012).

5. By avoiding time-consuming activities, improving students' communication skills, and delivering fair evaluation through thorough exercises, rubrics enhance teaching and learning relationships (Jaidev, 2011; Nkhoma et al., 2020). They help to increase self-assessment learning and encourage a learner-centered approach by empowering students to evaluate and comment on their own and one another's work (Ragupathi & Lee, 2020).

6. Rubrics enhance students' self-efficacy by identifying essential cognitive skills needed for project completion. They promote learning regulation, enabling students to plan and analyze their work (Janssen et al., 2015). Rubrics help students understand expectations, grading, and instructors' expectations, making them crucial for those lacking experience in specific tasks or expressions (Bresciani et al., 2004).

Additionally, rubrics encourage reflection on expectations and instructional strategies among teachers and students. Students can learn self-discipline and gain understanding of their learning styles (Luft, 1999).

2.3 Types of Rubrics

Rubrics can be broken down into four major categories: analytic, holistic, general, and task-specific, for evaluating students' work. The major rubric categories are given below.

2.3.1. Analytic Rubric

Themes: To evaluate the various relevant requirements separately and thoroughly handle them, an analytical rubric is used. Each criterion in the analytical rubric is used to determine a score on the several illustrative scales (Brookhart, 2013). Analytical rubrics categorise a task's performance and provide comments on its strong and weak points (Tedick, 2002). As a result, learning plans are more directly tied to learning goals (Truemper, 2004). Research papers, longer projects, and assignments that require complex thinking and problem-solving benefit most from analytical rubrics because they individually list the many categories for each evaluation component.

Rating Scale of Analytic Rubric: The analytical rubric offers a thorough scoring system that accounts for performance or scores on each category separately.

Best of Use: Analytical rubrics use a multiplier to evaluate skills independently, promoting consistency and reliability in grading. They can be used by teachers to create summative assessments at the end of a unit or course (Suskie, 2018).

Advantages: Detailed feedback on students' performance: Analytical rubrics are the "gold standard" of rubrics, providing detailed feedback on students' strengths, weaknesses, and skills. They facilitate teaching and learning by providing useful feedback, similar to a diagnostic method. As it evaluates each skill and competency, the analytical rubric promotes self- and peer-learning as well as reaching a minimal level of competency (Gupta & Gupta, 2021).

Correlate learning objectives: Several task requirements can be ranked in an analytical rubric according to how crucial they are to accomplishing the learning objectives (Hannagin & Hannafin, 2010).

Fair grading and consistency: According to Nkhoma et al. (2020), analytical rubrics increase the reliability and consistency of the grading of particular criteria for each performance level.

Analytical rubrics encourage self-evaluations and a student-centered perspective, which support the quality assessment of educational programmes (Crumly & Dietz, 2014; Grudnitski, 1997; Wright, 2011).

Limitations: Analytic rubrics can lead to biased grading due to overuse of criteria, which may not be uniformly applied by all raters. This can concentrate on lower-level abilities, avoiding higher understanding and knowledge measurement (Jae & Cowling, 2009; Kahneman, 2003; Rosenzweig, 2014). Additionally, creating thorough scores and skill-based rubrics can be time-consuming.

2.3.2. Holistic Rubric

Themes: According to a single descriptive scale, a holistic rubric assesses all of the requirements for a task (Brookhart, 2013). The instructor does not rate a task using the holistic rubric in sections; rather, all of the criteria are evaluated collectively (Nikto, 2001). Holistic rubrics, for instance, can be helpful for a work with linked requirements or a single learning objective. For instance, artistic creations, literary works, engineering designs, projects, oral presentations, broad posts, portfolios, and so forth. The emphasis is on overall quality, proficiency, or knowledge of certain subject or abilities (Mertler, 2001), and it will be effective for big group scoring (Young, 2013).

Rating Scale of Holistic Rubric: A comprehensive holistic rubric tracks the many degrees of overall skill on a single, comprehensive evaluation system that includes mechanics, organisation, and clarity.

Best of Use: Holistic rubrics are suitable for minor evaluations and identifying errors in excellent tasks (Brookhart, 2013). They are suitable for ambiguous or unclear responses when pupils are asked to respond (Chase, 1999). Holistic rubrics are suitable for tasks with excellent overall quality (Nikto, 2001). Holistic rubrics are useful for quick and broad evaluation of performance criteria in written assignments (Nkhoma, Nkhoma, Thomas, & Le, 2020). They help assess clarity, structure, content, and presentation, making it easier to assess students' aptitude for specific tasks (Nkhoma et al., 2020). Holistic rubrics correlate and evaluate the process effectively, as distinct or individual criteria may not accurately indicate coherence or lack cohesion in task assessments (Brookhart, 2013).

Advantages: Holistic rubrics increase reliability and validity by requiring fewer judgment calls and consistent application by various raters (Nkhoma et al., 2020). They enable honest evaluations by measuring performance's effect (Brookhart, 2013). Holistic rubrics speed up scoring by reducing decision-making and encouraging interconnectedness, promoting goal integration through various aspects, as suggested by Nitko and Brookhart (2007).

Limitations: Holistic rubric lacks specific feedback for development areas and overlaps standards, causing overweighting of criteria in holistic scoring (Chase, 1999). Assessment of holistic characteristics concurrently requires weighing various components equally, as the rubric assesses all characteristics simultaneously (Nkhoma et al., 2020; Gulikers et al. 2004).

2.3.3. General Rubric

Themes: General rubrics are statements of criteria that are common to many activities and can be used to a variety of assignments with related learning objectives. General rubrics evaluate several criteria independently, just like analytical rubrics do. The generic rubrics can be beneficial for oral communication skills, teamwork, self-evaluation, peer review, and teamwork in a variety of academic courses.

Rating Scale of General Rubric: Similar to how analytical rubrics examine multiple criteria independently, general rubrics do the same.

Best of Use: For students with fundamental skills and teachers who are having trouble creating new rubrics, general rubrics are advised (Brookhart, 2013). At the start of the assignment, they support self-regulatory processes and help students communicate their behaviours, improving their approach and overall learning experience (Jonsson & Svingby, 2007).

Advantages: General rubrics enhance consistency in assessment, encourage focus on learning outcomes, and develop competence in learning objectives for multiple tasks. They provide students with knowledge and abilities, inspire newcomers, and help them handle challenging situations. These methods contribute to successful learning outcomes and overall success (Bawden & Robinson, 2009; Moreno, 2004). Mastery of general skills involves using a rubric to measure essential criteria, allowing students to develop skills like writing and problem-solving, enabling teachers to monitor progress and save time (Popham 1997; Oakleaf 2007).

Limitations: Essentially, less uncomfortable for a growth mindset: General rubrics' inclination to be useless for exceptional accomplishments, challenging abilities, and creativity.

2.3.4. Task-specific Rubric

Themes: According to Brookhart (2013), “specific characteristics of the evoked performance” are examined individually when using a task-specific rubric to evaluate a single task (Gupta & Gupta, 2021). To accurately fill out the relevant parts of task-specific rubrics, students must successfully go from an elementary to a more specialised level of knowledge. Task-specific rubrics are advantageous for assessments that provide precise performance standards for a particular work, such as a final exam, a project, or a research proposal.

Rating Scale of Task-specific Rubric: A single task is evaluated using a task-specific rubric, and various generated performance components are assessed separately.

Best of Use: When evaluating the aptitude of particular facts, equations, techniques, or procedures, knowledge and consistency of scoring are essential. In a broad context, such as state-level accountability evaluations at the municipal, state, or federal level, task-specific testing is beneficial in high-stakes exams with major consequences for test takers (Arter & McTighe, 2001; Nkhoma et al., 2000).

Advantages: An advanced task-specific rubric is recommended for quality assurance, reliability, and consistency in assessment (Taggart et al., 2001). According to Arter and McTighe (2001) it can transform subjective evaluation processes into clear, consistent, and valid strategies. Task-specific rubrics also promote authentic assessment and visualization of learning targets, ensuring that students are able to achieve educational goals. Task-specific rubrics help students score higher and achieve further achievements, making them cost-effective for large-scale assessment with a large number of students (Howell, 2011; Howell, 2014).

Limitations: A task-specific rubric is time-consuming and requires investment in effort. It also limits students’ skills by limiting specific criteria and assessing open-ended tasks, making it challenging for assessors to meet them (Bawden & Robinson, 2009; Gulikers et al. 2004).

2.4. Essential Components of a Rubric

Rubrics are increasingly popular in educational settings as they support learning complex skills in 21st-century settings (Lowe et al., 2015). Three aspects of creating a rubric are highlighted in Popham’s article performance descriptors, criteria, and targeted learning goals (Popham, 1997). The matrix shape of the design, meanwhile, might not be the most crucial aspect to comprehend. Instead of only using rubrics as an assessment tool, focusing on these elements may improve learning and motivational outcomes for students (Brookhart & Chen, 2015). The rules for developing grading standards and rubric quality scales based on sources of literature and personal experience are examined in this article.

Performance criteria in row headings: The text describes performance criteria in row headings, describing assignments and standards, abilities, information, and conduct.

Rating scale in column headings: In column headers with a rating scale, it lists proficiency levels and grades for each type of assignment.

Performance level descriptors within each cell of the table: Criteria descriptions are written in consistent language, and the order of best to worst categories is indicated using observable and measurable behavior.

2.5. Guidelines for Building a Solid and Trustworthy Rubric

Despite the different types of rubrics, there are certain common procedures in the exercises for constructing each form of rubric. A strong and trustworthy rubric includes the following guidelines:

1. Establishing learning task objectives is the initial step in rubric development, ensuring learners meet expectations through easy interaction between teachers and instructional styles (Arter & McTighe, 2001; Stiggins, 2001; Wiggins & McTighe, 2005).
2. Select appropriate rubric type for assignment activity, starting with a standard collection of commonly used rubric types (Stiggins, 2001).
3. Interactively designing rubrics with target students enhances understanding of grading techniques by involving students in discussing performance strengths and weaknesses, and developing criteria for effective grading (Andrade, 2001; Huba & Freed, 2000).
4. Adopt and adapt stages are useful for developing rubrics, allowing for use without adjustments, and modifying performance-level descriptors to match teachers’ expectations (Crusan, 2010).
5. Test and improve rubric by applying it to student work for peer and individual evaluation, enabling teachers to assess students’ understanding and teaching methods.
6. Collaboratively sharing the rubric with teachers will help ensure that the rubric is valid and that teachers receive feedback on student performance that is tied to the rubric.

7. A good rubric uses detailed, descriptive language that aids students in improving their work and comprehending requirements. In order for students to effectively communicate their ideas, the rubric structure must be straightforward and constant throughout the entire process (Rubric Best Practises, Examples, and Templates).

8. To properly assess if the criteria have been effective, it is necessary to continuously track how well “the scale was functioning and in which parts” (Janssen et al., 2015; Wiggins & McTighe, 2005).

3. Materials and Methods

This study used both quantitative and qualitative (interview) research approaches to collect and analyse numerical data. To provide technical support and to save time and effort, the researchers employed statistical processing to examine data for educational research. The purpose of the study was to evaluate teachers' and students' perceptions on the use of rubrics to enhance university level online teaching strategies in Bangladesh. According to the study's findings, 15 faculty members and 33 graduate students from a private institution in Bangladesh who were enrolled in the fourth-year honours program's eighth semester participated in the quantitative analysis. Only three teachers utilise rubrics in their online classrooms and are proficient with their fundamental ideas, according to the paper interview part.

4. Findings and Results

4.1. Quantitative Results

33 graduate students in the fourth year honours program's eighth semester who participated in the study claimed they were aware of the various marking standards applied in their classes, according to the study's findings. Given that analytical and task-specific rubrics were made available to them from the first day of class. The researcher frequently reminded students of the available rubrics before an assignment was submitted and then again along with feedback on a graded assignment, it is not surprising that students reported being aware of the course rubrics. It is significant to notice that students didn't answer this question until the conclusion of the semester, despite the researcher's constant reminders about the course rubrics. The comprehension of the course rubrics could be the subject of future research.

The instructional rubric for the initial peer assessments was then given to the students, and the researcher had an online session to clearly outline the criteria of the rubric. By using the rubric to grade the initial peer assessments, the researcher was able to teach the students how to review and remark using rubrics. The online session was recorded and posted as a resource for the students' future use. The researcher made it very obvious what the peer assessments were for, how they related to the semester exams, and what the learning goals were for the course.

Features of the rubric are complemented with feedback on written and assignment activities from 33 students. online learning assessments. Six segments about the respondents' personal experiences and knowledge about the use of rubrics in online education were included in the survey.

4.1.1. Rubrics help organize tasks, free attention, and clarify instructor expectations for crucial facts

Using rubrics to manage assignments, free up time for other activities, and make clear what the instructors want in terms of major points was agreed upon by 91% of respondents, according to the research findings. However, 9% of respondents in the segments disagreed with the segment's item (Figure 1).

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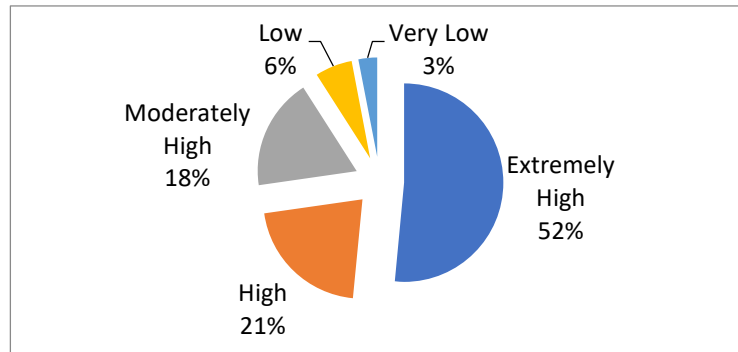


Fig-
Organiza-
tasks, free
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expectations for crucial facts

4.1.2. *The use of a rubric simplifies assignment structure, addresses odd terminology, and saves time on unimportant details*

According to the research, 94% of participants believed that using rubrics makes assignment structure simpler, deals with unusual vocabulary, and saves time on irrelevant issues. However, 6% of respondents in the segments disagreed with the segment's item (Figure 2).

The
rubric simplifies assignment structure, addresses odd terminology, and saves
time on unimportant details

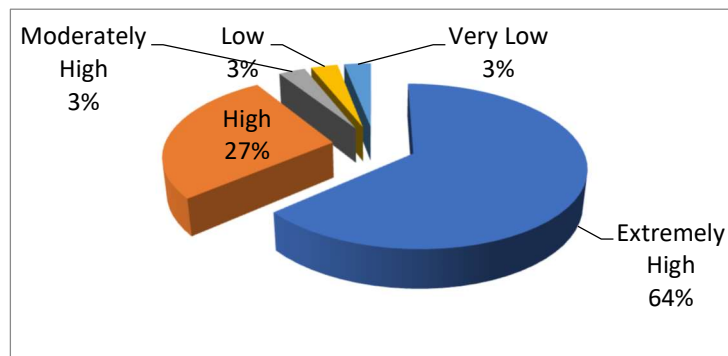
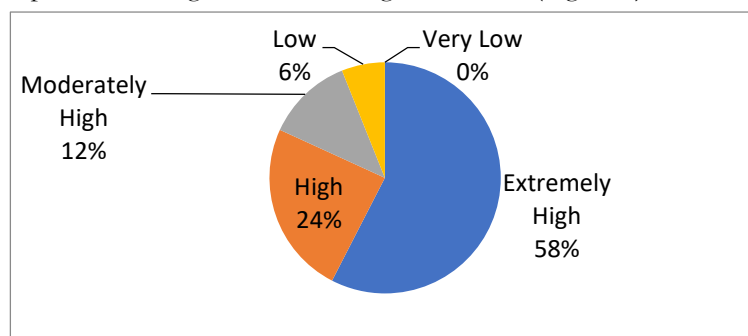


Figure 2.
use of a

4.1.3. *Rubrics help identify shortcomings and flaws in assignments, enabling self-reflection and re-analysis*

According to the research, 94% of participants believed that using rubrics helps students detect problems and errors in their work, allowing for self-reflection and re-analysis. However, 6% of respondents disagreed with the segment's item (Figure 3).

Fig-
ure 3. Identification of shortcomings and flaws in assignments, enabling self-
reflection and re-analysis



4.1.4. Utilizing a rubric, specific comments, and an accurate assessment with scoring standards, the work was carefully improved

Here, the research’s findings indicate that 91% of respondents agreed that the work was thoroughly revised using a rubric, precise remarks, and an accurate assessment with scoring standards. Nevertheless, 9% of respondents in the segments disagreed with the segment’s item (Figure 4).

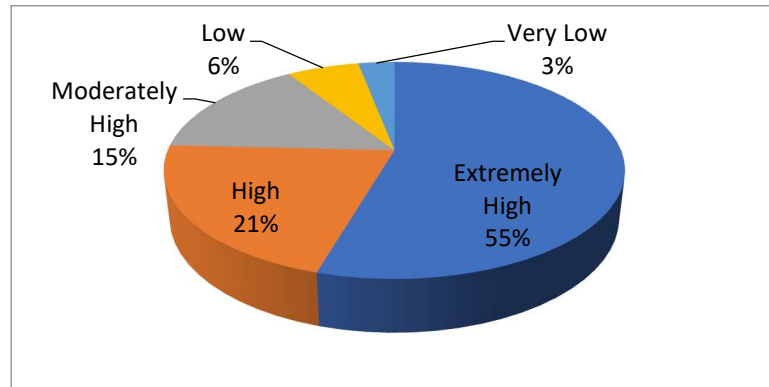


Figure 4. Utilizing a rubric, specific comments, and an accurate assessment with scoring standards

4.1. 5. Rubrics enhance performance, productivity, and bridge the gap between academic work and employer expectations

The study’s findings indicate that all respondents (100%) agreed that rubrics help students perform better, are more productive, and help students meet the demands of employers. However, in segments, 0% respondents disagreed with item. (Figure 5).

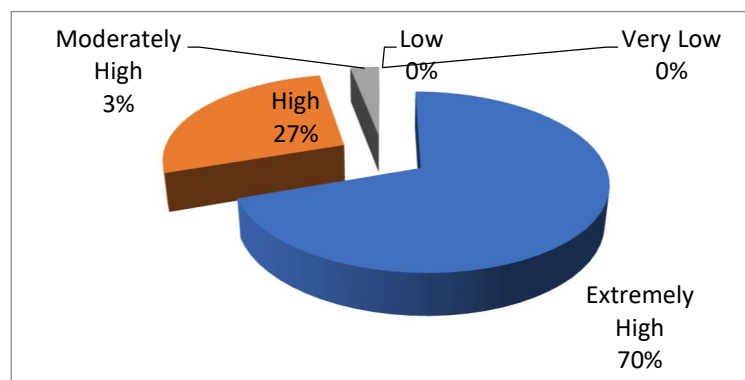
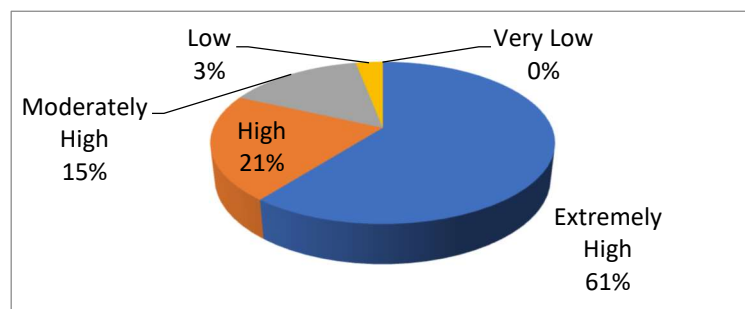


Figure 5. Rubrics enhance performance, productivity, and bridge the gap between academic work and employer expectations

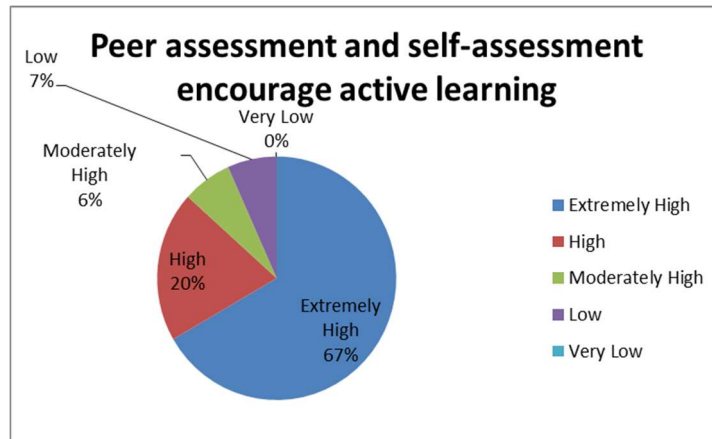
4.1.6. Rubric reduces prejudice in grading, enhances critical thinking skills through self-assessment and peer review

97% of respondents according to research, that rubric lessens prejudice in and improves thinking through self-peer-review. However, 3% of respondents disagreed with the segment’s item (Figure 6).



agreed, the using a grading critical abilities and

Figure 6. rubric to prejudice enhances thinking through and peer 4.1.8. questions personal and the usage of



Use of reduce in grading, critical skills self-assessment review Seven about their experiences knowledge of rubrics in

online education were included in the survey for 15 teachers

4.1.8.1. Peer assessment and self-assessment encourage active learning

According to the study, 93% of participants agreed that using rubrics to facilitate peer and self assessment tools promotes active learning. However, 7% of the segment respondents disagreed with the segment’s item (Figure 7).

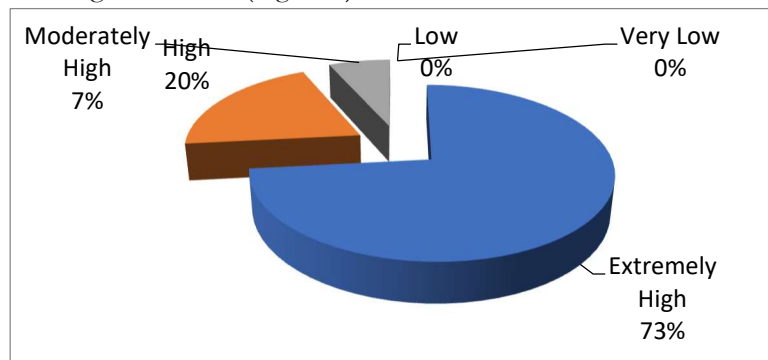


Figure 7. Peer assessment and self-assessment encourage active learning

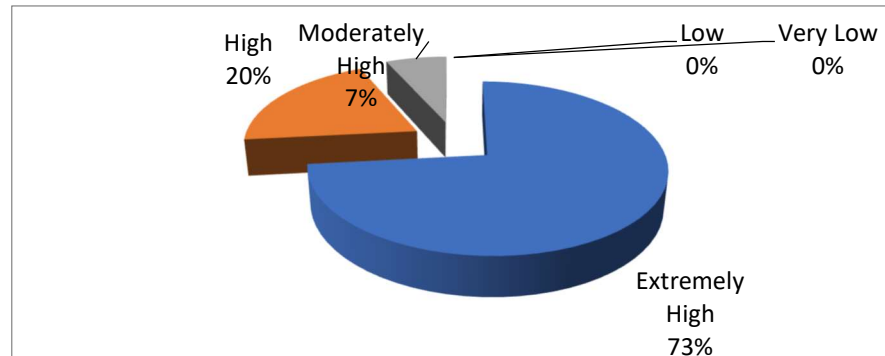
4.1.8.2. Innovative teaching with technology and rubrics encourages learner engagement

According to the research’s findings, all respondents (100%) agreed that employing rubrics promotes learner engagement and supports innovative teaching with technology. Despite this, 0% of respondents in the Segments disagreed with the statement. (Figure 8).

Figure 8. Innovative teaching with technology and rubrics encourages learner engagement

4.1.8.3. Course evaluation and feedback by rubrics communicate high expectations

93% of respondents agreed, as evidenced by the research’s findings, that employing rubrics for course evaluation and feedback communicates high expectations. However, 7% of re-

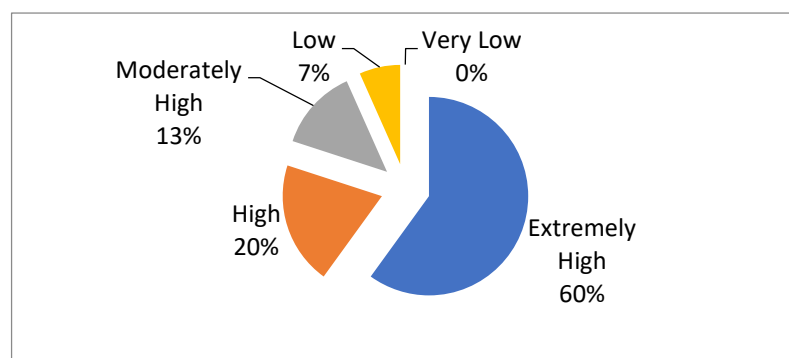


spondents disagreed with the segment’s item (Figure 9).

Figure 9. Course evaluation and feedback by rubrics communicate high expectations

4.1.8.4. Assessments become fair and unbiased

According to the research, all respondents (100%) agreed that utilising a rubric makes assessments more impartial and fair. However, in the segments, 0% of respondents disagreed with the item (Figure 10).



Rubric
diverse talents and ways of learning

Figure 10. Assessment become fair and unbiased
4.1.8.5. supports respectfully

According to the research findings, all respondents (100%) agreed that using rubrics fosters respect for the various learning styles and talents of students. However, in the segments, 0% of respondents disagreed (Figure 11).

Figure 11. Rubric Support of rubric for diverse talents and ways of learning

4.1.8.6. Rubric use increases the risk of malpractice and increases the amount of self-spirit

Here, the research findings shows 87% respondents agreed that using rubric increases the risk of malpractice and increases the amount of self-spirit. Nevertheless, 13% respondents disagreed with the item in the segments (Figure 12).

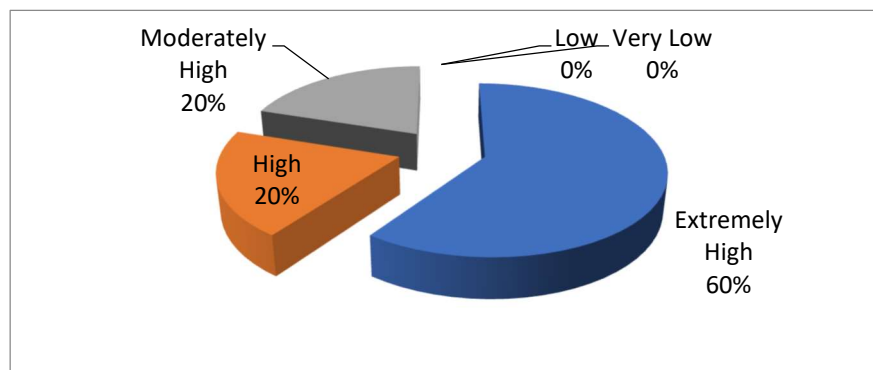
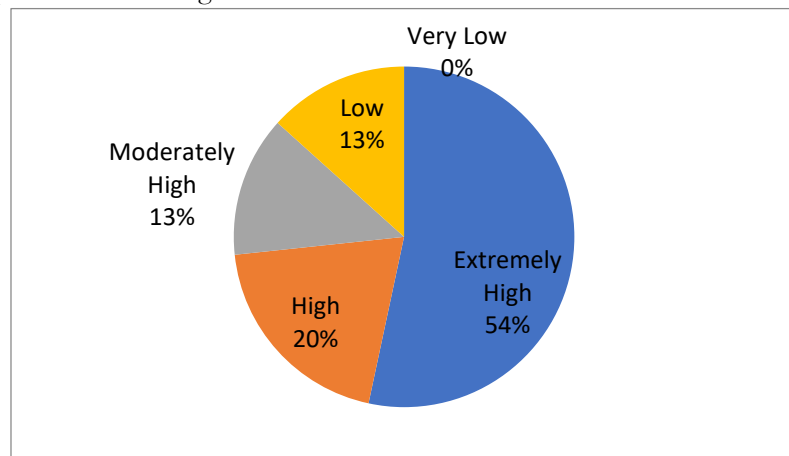


Figure 12. Use of rubric increases the risk of malpractice and self-spirit

4.1.8.7. Course design and distribution model between teachers and learners encourage contact between students and teachers

In this case, the research’s findings indicate that 93% of respondents agreed that using rubrics to help with course design and the distribution model between teachers and students encourages interaction between

ertheless, of respondents segments disagreed the segment’s item (Figure 13).



them. Nev- 7% in the with

Figure 13. Course design and distribution

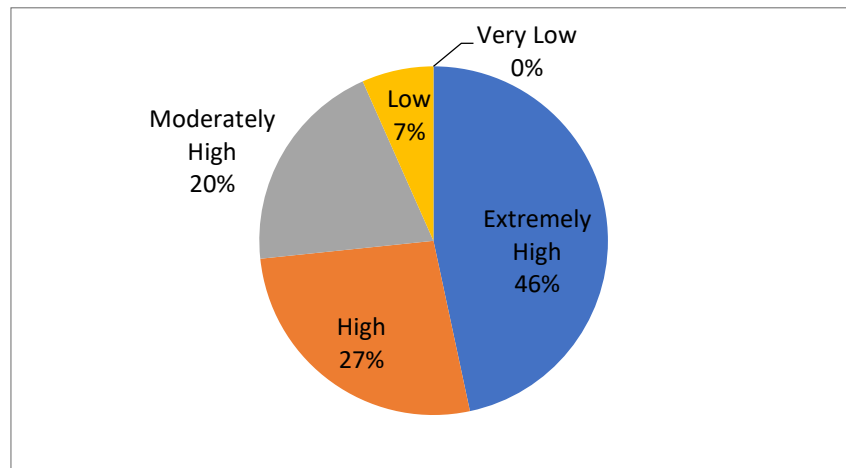


Figure 13. Course design and distribution between teachers and learners

4.2. Qualitative Results

The qualitative part revealed during the paper interview, only three teachers who utilise rubrics in their online classes and are familiar with their fundamental concepts showed interest in this section of the interview (Table 1).

Table 1. Interview responses of the participants

Themes	Participant 1	Participant 2	Participant 3
1. How did you become interested in assessment tools rubrics for online instruction?	“The use of rubrics can mediate improved performance in several ways, including lowering anxiety, assisting with the feedback process, enhancing student self-efficacy, and promoting student self-regulation.”	“The aspect of the rubrics has significance that could lead to better interactions between teachers and students. Rubric disrupt disempowering power relations between students and lecturers as they enable students to participate more actively in the assessment process.”	“Students using rubrics for self-assessment and showed that this not only helps in their understanding of how they learn but also improves their understanding of the relationship between assessment and learning, highlighting the significance of involving the learner more intentionally in assessment practices.”
2. What are your opinions of using rubrics to make online learning more effective?	“The effective usage of rubrics for online education won’t be as effective without holding adequate training workshops. The proper usage of rubrics must be continuously monitored, and there must be adequate training workshops for faculty members to comprehend the philosophy and assessment processes.”	“The teaching resource The Bangladeshi setting presents Rubric with a number of difficulties, such as content-based laws and regulations, conventional teaching methods, and insufficient facilities. If instructors are not adequately taught to implement the assessment policy in the classroom, they find it to be troublesome. The content-based curriculum is created using conventional methods, and	“Adequate training workshops are crucial for effective use of rubrics in online education. Monitoring and training are essential for faculty members to understand philosophy and assessment processes. Challenges include large class sizes, infrastructure, and inadequate information structure.”

teachers place a strong emphasis on the future development of statements, goals, and objects.”

The results and summary of Table 1, Question 1, from three teachers illustrate that Rubrics can improve performance by lowering anxiety, assisting feedback, enhancing self-efficacy, and promoting self-regulation. They also disrupt power relations between students and lecturers, enabling active participation in the assessment process. Students using rubrics for self-assessment improve their understanding of learning and the relationship between assessment and learning, emphasizing the importance of intentionally involving learners in assessment practices.

The answers to and description of Table 1, Question 2, from three teachers show that sufficient training sessions are necessary for the use of rubrics in online education to be successful. These trainings aid faculty members in their understanding of philosophy and evaluation procedures. Large class sizes, poor infrastructure, and an information structure are problems. The environment in Bangladesh provides difficulties such content-based rules, traditional educational techniques, and inadequate facilities. For assessment policies to be effectively implemented, instructors must get adequate training.

5. Discussion

The key finding demonstrated that, in accordance with the students' extremely favourable feedback, rubric-based instructions was an effective evaluation technique, and students' performance improved as a result. According to teachers' perspectives, the main finding indicated that rubric-based education was a successful assessment method, and students' performance improved after its adoption.

As a result, employing rubric-based instruction to teach the online course was effective in improving evaluation and performance because the research findings showed that students' scores increased as soon as the scoring rules were put into place.

The findings were in line with those of Wolf & Stevens (2007), Andrade (2005), Guskey (2003), Jonsson and Svingby (2007), Gupta and Gupta (2021), who reported that rubrics promote learning regulation by enabling students to plan and analyse their work and are helpful for teachers in assessment by providing fair grading, feedback, and challenging work.

According to research conducted by both students and teachers, rubrics are crucial tools for arranging tasks, highlighting crucial information, and dealing with specific language. They help identify flaws, revise work, and offer constructive criticism. Rubrics improve performance, bridge the gap between academic work and employers' expectations, and reduce bias in grading. They also lower anxiety, provide feedback, enhance self-efficacy, and promote self-regulation. Rubrics also disrupt power relations between students and lecturers, enabling active participation in the assessment process. Students using rubrics for self-assessment improve their understanding of learning and the relationship between assessment and learning, emphasizing the importance of intentionally involving learners in assessment practices.

In reality, a lack of opportunities to use rubrics was one of the obstacles that Bangladeshi students were facing, and one of the reasons Bangladeshi higher learning students did not want to learn was that the teaching methodology and assessment procedure in both online and classroom settings were not interesting. Three teachers emphasize the need for adequate training sessions for effective rubric use in online education. Faculty members benefit from better understanding of philosophy and evaluation practices. Bangladesh faces challenges like content-based education, conventional teaching methods, and subpar facilities.

As a result, the current study can offer a deeper comprehension of the rubric as a potent instruction and systematic guidance for using it to qualify online learning in a way that supports improving online learning performance in higher education in Bangladesh. The future of Bangladeshi undergraduate students' online learning might be brighter and better satisfy the demands for quality education in the workplace with the use of a well-designed and scientific rubric.

6. Conclusion and Recommendations

For Bangladeshi tertiary education, rubrics are an authentic evaluation instrument that places a strong emphasis on self-directed learning, learning objectives, and consistency. By evaluating students, peers, and teaching assistants, they can save time and effort. By promoting high-quality education, streamlining online education, and boosting assessment validity and reliability, rubrics can enhance programmes and courses. A discipline-specific rubric bank should be developed at the national level, and annual adjustments should be made based on the outcomes to guarantee effective implementation. National resources should be generated by standardised training and development programmes, and there should be national seminars for developing rubrics and exchanging information. Before creating and utilising rubrics in education, a guidelines manual should be developed.

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Short Report

The Challenges in Tertiary Level Study in Professional Communication Among University Graduates Through Online Education

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Abstract: The professional communication had become an importance skillset among the individuals especially when comes to the university graduates among the tertiary level study. However, the change in the education approach due to the challenges from the Covid-19 had observed the shift towards the online education which creates concerns with the digital era of education deliveries. The employers had been consistently highlighting the lack of strong demonstration within the communicating skills where the graduates had been struggling to gain the softskill in communication skills through the online learning with lack of physical communication contact. The key findings and recommendation had been drawn in aligned with this concern to address the reasonable approach to change the support in education to provide the rightful delivery of the communication skillset to the future graduates from tertiary level of study.

Keywords: professional communication, online education, Covid-19, tertiary level study, university graduates

1. Introduction

Many of the courses offered in Malaysia's higher education system place a strong emphasis on the importance of professional communication as a necessary soft skill for the next generation to learn in order to adequately prepare themselves for the business environment in which they would be expected to work. The student is able to communicate with the utmost level of self-assurance and successfully deliver the intended message to the intended audience thanks to the professional communication. The skills of listening, writing, and reacting to others in individual or group communication in the business or personal interaction are all included in the concept of professional communication. Oral speaking skills are only one component of the definition of professional communication. Because job roles and responsibilities in the workplace have shifted from being individualistic to teamwork, which requires good communication and engagement with team members as well as peers from multiple different layers, this skillset has been in high demand in the business world in recent years. This is because job roles and responsibilities in the workplace have evolved from being individualistic to the teamwork. Therefore, having well-honed professional communication skills has gradually gone from being a desirable additional aptitude to a necessary one. This shift in prominence is due to the fact that certain skillsets are no longer optional.

However, the rise of the digital era has presented some difficulties in the process of developing professional communication skillsets in tertiary education. The emergence of the Covid-19, which mandated a change from in-person classes to online classes, has made it more difficult for students to acquire the appropriate skillset in professional communication through classroom instruction. This has increased the difficulties faced by students. The students did not obtain the necessary confidence to build up their talent in communicating with the appropriate manner, which concerns the graduates' employability in the future, because they did not engage with the surrounding classmates and lectures. When it comes to business communication in the workplace, the students' capacity to talk in a professional manner has

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suffered as a result of the increased usage of online communication platforms such as social media applications. This undoubtedly brought to the forefront and attention of those in charge of tertiary education the need to reconsider the possibility of making a change in the approach taken to teach professional communication skills to students at the higher education level

2. Key Findings

According to Thomas, Piquette, and McMaster (2016), acquiring the skills necessary for effective corporate communication would necessitate an increased level of participation while employing the appropriate variety of the English language. In order to boost a graduate's employability in the international labour market, the English language skills of the graduate will need to be developed during their time in postsecondary education as part of the required coursework. Clokie and Fourie (2016) had previously discussed the importance of the soft skill of professional communication to become part of the essential skills that will help the graduates to stand out during the interview with employers and, as a result, increase the visibility and employability among the graduates. This was done in order to help the graduates become more visible and employable. It is general knowledge that employers will be more drawn to graduates who are vocal, particularly in situations where previous work experience is not a factor in determining recruiting requirements for recent graduates.

Since Covid-19 had brought a big shift in the effective delivery of the abilities such as communication that will provide job preparedness for the employment market, Alam and Parvin (2021) had been emphasizing on the impact from the shift to online classes and education. This is because Alam and Parvin (2021) had been emphasizing on the impact from the shift to online classes and education. It is common knowledge that academic achievement alone will not distinguish a graduate as having an advantage over their peers in a world in which the ability to communicate effectively has become an essential prerequisite for employment. Because of this, it is becoming increasingly difficult for students to fulfil these criteria through the use of an online education. A similar statement was supported by Pasion et al. (2021), in which the study suggested that the impact of Covid-19 on undergraduate business students had become quite concerning as employers tend to have lower confidence in their skill sets and capabilities with the quality of students coming through online education. This statement was supported by the authors of the study.

3. Recommendations

This had been offering clear aware that the development and learning curve for professional communication had been more challenging and yet concerning for higher education, which may potentially negatively affect the graduate's employability in the job market. This had been providing clear conscious that the development and learning curve for the professional communication had been increasing in difficulty. Therefore, the recommendation and proposal plan such as the increasing the related module for communication needs like presentation and public speaking assignment should be allocated as part of the mandatory needs to ensure the right exposure for our students in tertiary level to have the opportunity to develop the professional communication skills before facing the employment in the future. The confidence level for the students had been importance which should be groom at the early level to enhance the confidence of an individual in facing the necessary challenges in demonstrating the presentation skills. This will ensure the right exposure for our students in tertiary level to have the opportunity to develop the professional communication skills before facing the employment in the future. It is important to place more emphasis on revising the English language module and requirement in order to improve students' capacity to vocally speak with a higher level of self-assurance, which will in turn boost students' readiness for the tertiary level programs. The comfort level of the language had become a must to motivate the students to grow their ability to speak out loud in front of the audience which is crucial for the individual to improve in terms of choice of words as well as spontaneously presenting the ideas and concepts which comes to business presentation skills. This will become an innovative approach to assist the development of the individual ability to create visibility for the students to improve their communicating skills regarding the medium of learning is online or physical that will overcome the concerns from the employers towards the communicating skills of the future graduates.

4. Conclusions

The professional communication skills will always continue to be the essential skills in educational and working contexts where the persistent improvement on the appropriate approach needs to be pushed in order to have higher quality graduates from tertiary level being accomplished. The establishment of online classes by Covid-19 undoubtedly presented additional challenges in the learning curve for professional communication between students. On the other hand, it also provided the education industry with the opportunity to receive a wakeup call and reconsider the potential gaps that could result in missed opportunities to improve the designation of study in tertiary education. It is something that many people are looking forward to seeing, particularly in the context of tertiary education, and that is the prioritization of the development of professional communication skills among students of the future generation. This is something that a lot of people are looking forward to witnessing.

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Short Report

An Inquiry into the Evolution of the Project-based Instructional Approach “Three” from “A Program” to “A High-quality Course”

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Abstract: Within the context of education reform, there is a pressing need to overhaul and enhance the existing educational approach. As part of this endeavor, it is imperative to establish a more adaptable and multifaceted project-based teaching methodology. However, it is important to acknowledge that this approach also exhibits certain inherent limits, which become increasingly apparent during its implementation. However, it is worth considering if this particular pedagogical approach can effectively address its inherent limits and successfully facilitate the desired transformation and advancement of the educational system. This research aims to examine the efficacy of the “three” teaching approach in facilitating the transition from a mere instructional plan to an effective classroom experience.

Keywords: project-based teaching method, “three” teaching approach, pedagogical techniques

1. Introduction

Project-Based Learning (PBL) is a pedagogical approach rooted in the constructivist theory of learning (Kokotsaki et al., 2016). It posits that optimal learning occurs when individuals actively engage in educational activities, employ critical thinking skills, and engage in problem-solving endeavors. Simultaneously, Project-Based Learning (PBL) is a pedagogical approach that emphasizes extensive student engagement, autonomy, and practical application. This approach places emphasis on the application of acquired knowledge by students in real-world projects or projects that incorporate authentic contextual elements. By engaging in problem-solving activities, students are able to deepen their understanding and mastery of the subject matter (Kizkapan & Bektas, 2017). Additionally, this approach fosters the development of problem-solving skills and creativity among students, while facilitating the seamless transfer of knowledge between new and existing concepts. Ultimately, this approach aims to enable students to construct a comprehensive cognitive framework.

Nevertheless, the project-based teaching approach is a novel instructional method that possesses distinct attributes such as visualizing teaching outcomes, encompassing comprehensive teaching content, fostering open teaching connections, and promoting collaborative teaching dynamics. Consequently, there is a growing concern regarding whether this approach should be regarded as a mere program rather than an exemplary class. The fundamental foundation of a “high-quality educational course”.

2. Focus on the interpretation of the problem of project-based teaching methods

2.1. Teachers’ heavy workload

A major challenge in implementing project-based curricula is the simultaneous need for changes in curriculum, instruction, and assessment practices, which can often be unfamiliar to both students and teachers (Barron et al., 1998). The successful implementation of project-based pedagogy requires a significant commitment of time and effort from teachers. This commitment involves tasks such as analyzing teaching content, establishing project objectives, designing projects, formulating implementation guidelines, and providing timely guidance and feedback on student performance and outcomes. One of the primary challenges

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faced by educators is the transition from a traditional instructional role to that of a facilitator, mentor, and guide in the learning process. Teachers should design projects that align with both their own teaching style and the level of student choice (Larmer & Mergendoller, 2010). This implies that teachers must delegate a certain level of authority to students within the classroom, while also demonstrating trust and setting high expectations for them. Effectively integrating these various aspects of transformation is crucial for implementing project-based education logically.

2.2. Higher requirements for students as a whole

The implementation of project-based teaching necessitates that students possess a particular level of collaborative skills and self-directedness, hence presenting a notable obstacle for certain individuals. In the context of project-based learning, it is customary for students to engage in collaborative group work, necessitating the cultivation of effective collaboration abilities. This entails the ability to interact harmoniously, communicate effectively, and collectively accomplish the project objectives. Students possess the capacity for autonomous learning and inquiry, enabling them to proactively identify and address challenges while continuously broadening their knowledge and skill sets.

2.3. Difficulty in determining the assessment standard

The outcomes of project-based education methods exhibit a wide range of variations, rendering the evaluation criteria susceptible to subjective influences and challenging to accurately quantify. In the context of project-based learning, it is common for students or groups to exhibit varying levels of performance and outcomes. Consequently, the establishment of evaluation criteria typically falls within the purview of the instructor or evaluator. However, it is worth noting that different instructors or evaluators often adopt distinct evaluation standards, thereby introducing subjectivity into the assessment process. Furthermore, the project-based instructional approach also emphasizes the development of students' practical and problem-solving skills, which pose challenges in terms of quantification. Consequently, the evaluation criteria associated with this teaching technique are similarly arduous to measure.

2.4. The actual conversion effect is not obvious

The implementation of a project-based teaching approach necessitates that students possess specific practical skills and an inquisitive mindset. This method involves engaging in project-based learning and practical application over a designated timeframe. Furthermore, it necessitates that teachers possess a certain level of teaching experience and management proficiency. Additionally, project-based teaching requires a longer duration compared to traditional teaching methods. Nevertheless, the learning outcomes of this particular subject mostly manifest in the development of practical skills and problem-solving capabilities. However, the translation of these acquired talents may not be readily apparent and may not be directly correlated with students' academic performance, making their application more challenging.

3. Project-based teaching method of the “three” construction

3.1. Project design refinement

The design of a project-based teaching approach should thoroughly consider the specific specifics in order to ensure the successful implementation of the project and the desired learning outcomes for students. Drawing on the analogy of a script, a well-developed project encompasses various elements such as the project's objectives, contextual factors, time management, and spatial considerations. Moreover, it intuitively embodies the fundamental concepts underlying the project, enabling a comprehensive understanding of the physical and mental development of students. Furthermore, it establishes connections between these concepts and their original counterparts, ensuring that higher-order learning builds upon foundational knowledge and constructs a coherent cognitive system.

3.1.1. Project Objective Clarity

Within the realm of project design, it is imperative to establish clear objectives and articulate the anticipated learning outcomes of the project. The project's objectives must align with subject standards and curriculum objectives. Additionally, it is crucial to assess and provide feedback on students' learning outcomes upon project completion. This process will facilitate students' mastery of relevant knowledge and skills, enabling them to apply them effectively in real-world scenarios. The alignment of project objectives with subject standards and curricular objectives can facilitate the integration of key concepts into the project,

benefiting both teachers and students by promoting cooperative thinking and learning. Furthermore, it is imperative to establish a comprehensive understanding of students' learning outcomes, taking into account their physical and mental developmental patterns as well as the prevailing circumstances. This will enable the adjustment of project objectives to ensure that students are afforded sufficient time to successfully complete the project and meet submission deadlines.

3.1.2. Rationality of task allocation

Within the framework of project design, it is imperative to allocate tasks in a reasonable manner, duly considering the unique characteristics and capabilities of each student involved. Prior to allocating tasks, it is necessary to categorize them based on the project's requirements and the inherent characteristics of the tasks, taking into account the concept of synergy and a rational distribution of work. In order to ensure the quality and efficiency of work completion, it is imperative for students to engage in cooperative and coordinated efforts. Simultaneously, it is crucial to establish a rational division of labor to prevent the occurrence of task duplication or omission. When assigning assignments, it is imperative to consider not only the potential for collaboration but also the students' real capabilities, in order to maintain a balance between the project's level of complexity and achievability. Prior to forming groups, students can be categorized based on their academic performance, current performance, and professional history. Subsequently, work can be allocated based on the specific circumstances of each group, so ensuring a more equitable distribution of duties.

3.1.3. The rationality of time management

When designing a project, it is essential to carefully plan the allocation of time, considering both the specific circumstances of the students involved and the level of complexity associated with the project. The level of difficulty and intricacy associated with a work is a crucial determinant of the time required to complete it. In order to effectively allocate task time, it is necessary to conduct a thorough evaluation and organization based on the activity's level of difficulty and complexity. This approach guarantees that students are provided with the time and resources to successfully accomplish the task and meet the submission deadline. The significance and immediacy of the work are also key considerations in the planning of task duration. When determining the allocation of task time, it is necessary to conduct a rational assessment and organize the tasks based on their level of relevance and urgency.

3.2. Changes in project guidance

During the project implementation phase, it is crucial for professors to provide timely guidance to students, ensuring the seamless execution of the project while also facilitating deeper levels of thinking and learning among students. During the process of guiding, it is imperative for teachers to be mindful of the diverse issues that may arise, including but not limited to employing a singular approach to guidance, excessively prolonged guidance sessions, and an excessive frequency of guidance interventions. These issues will have an impact on the students' real learning outcomes and will also impede the successful execution of the program. Educators must exhibit a keen focus on students' learning circumstances and the execution of extracurricular projects, while also possessing the capacity to address diverse challenges and promptly adapt instructional guidance as needed.

The implementation of diversified guiding techniques allows students to select an appropriate type of advice based on their individual needs and preferred learning styles. In the context of project guidance, various tools can be employed to enhance the learning experience. These tools encompass narratives, games, demonstrations, and other interactive elements. By utilizing such diverse methods, project guidance becomes more engaging and captivating, thereby fostering learners' interest and motivation. Furthermore, the provision of varied learning materials, including text, images, audio, and video, caters to the distinct needs of learners, facilitating their comprehension and mastery of project content. This approach also enhances learners' involvement and satisfaction. Additionally, fostering different forms of interaction, such as online discussions, interactive games, and group collaboration, promotes communication and cooperation among learners. This, in turn, cultivates a positive team dynamic and augments learners' participation and learning outcomes.

The rationalization of time allocation in project guidance encompasses not only the implementation phase of the project itself, but also the scheduling of instructor guidance. Prior to commencing the project, it is imperative to establish a comprehensive project guidance plan encompassing specific objectives, content, and timeframes. This will facilitate efficient management of time and resources throughout the project implementation process.

Additionally, it is essential to determine the prioritization of project guidance activities, enabling the completion of critical tasks in situations where time is limited. This approach ensures the quality and effectiveness of project guidance while optimizing the utilization of time and resources. During the execution of a project, it is imperative to minimize unproductive project guidance time and adaptively modify the project guidance schedule and progress. For instance, the utilization of repetitious learning materials and elimination of invalid learning activities can lead to time and resource savings, as well as enhance the efficiency and efficacy of project supervision.

3.2.1. The level of guidance intensity

Within the context of project guidance, it is necessary to comprehend the students' proficiency at each stage and afterwards modify the level of guidance intensity accordingly. During the guidance process, excessive urging and direction from teachers might potentially disrupt students' ability to engage in autonomous thinking. Consequently, several variables may impede the development of students' original ideas. Even in situations where the teacher's supervision is overly involved, pupils tend to heavily depend on the teacher's advice, resulting in the development of a singular perspective or viewpoint. During the implementation phase of a project, it is crucial for teachers to effectively monitor students' comprehension and development in each aspect. This should be done in a timely manner, taking into account their learning trajectory and level of guidance required. It is important to avoid allowing the guidance provided to become perceived as intrusive or disruptive. For instance, when students demonstrate a strong understanding of a concept, it may be beneficial to loosen the level of supervision provided. This approach allows students to have greater autonomy in their learning, fostering independent thinking and expediting project advancement, so facilitating the growth of activities.

3.3. Quantification of project evaluation

The utilization of project-based pedagogy in the execution of the entire evaluation process aims to provide an autonomous and all-encompassing assessment metric. Evaluation during the entire process encompasses several forms of feedback, such as input from teachers, students, teams, and self-reflection. The utilization of multidimensional feedback in project-based pedagogy has the potential to facilitate deep learning and enhance the production of high-quality outcomes among students.

1. The inclusion of extensive evaluation in the project's implementation is a crucial aspect that will significantly influence students' learning outcomes. Within the realm of project activities, the absence of a comprehensive evaluation hinders the identification of student errors, the measurement and scoring of their outcomes, and the ranking of their performance. However, it is through the implementation of a complete assessment that students are able to progressively advance towards achieving accuracy and proficiency. Effective assessments are crucial in facilitating students' ability to refine their most promising ideas and offer them at the appropriate juncture. Furthermore, these evaluations aid in the development of a comprehensive framework for learning, striking a harmonious equilibrium between individual and collective assessment. Furthermore, during the project evaluation session, it is imperative for teachers to employ an evaluation scale that aligns with the class schedule in order to comprehensively assess their performance. It is important to note that any project strategy employed is an essential component of the comprehensive evaluation and remains in effect throughout the duration of the project.

2. Formative evaluation encompasses the assessment methods employed during the course of a program, which can be disseminated to students through diverse modalities. There is a prevalent belief among individuals that formative evaluation, such as the use of grades, serves as an indicator of conclusion, signifying the completion of a certain phase of the job. In contrast, formative assessment is not only pertinent to subsequent stages of learning, but also offers supplementary informational resources for the purpose of designing instructional strategies and facilitating subsequent learning activities. Formative assessment plays a crucial role in the process of learning by providing learners with prompt feedback, enabling them to effectively structure their information, showcase their comprehension, and generate products of superior quality. Formative assessment places emphasis on the learning activities of students, as opposed to solely evaluating their performance at the conclusion of these activities. Each instance of formative assessment serves to furnish students with timely, thoughtful, and actionable opportunities for feedback.

4. Conclusion

Within the context of educational reform, there is a pressing need to overhaul and enhance the existing educational methods. In particular, there is a growing recognition for the development of a more adaptable and varied project-based teaching approach. However, it is important to acknowledge that this teaching method also has its own limitations, which become increasingly apparent during its implementation. These limitations are particularly pronounced in relation to teachers, students, teaching evaluation, and the overall effectiveness of the teaching process. This study examines and enhances the implementation of a specific teaching methodology by considering project design, project guidance, and project evaluation. The aim is to address the limitations of the methodology, achieve a genuine transformation and improvement in educational practices, and explore strategies for effectively transitioning from a theoretical plan to an effective classroom practice. In this discourse, we shall explore the methods by which the transition from “a program” to “a well-constructed lesson” might be effectively achieved.

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Opinion article

Harnessing AI to Power Constructivist Learning: An Evolution in Educational Methodologies

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Abstract: This article navigates the confluence of the age-old constructivist philosophy of education and modern Artificial Intelligence (AI) tools as a means of reconceptualizing teaching and learning methods. While constructivism champions active learning derived from personal experiences and prior knowledge, AI's adaptive capacities seamlessly align with these principles, offering personalized, dynamic, and enriching learning avenues. By leveraging AI platforms such as ChatGPT, BARD, and Microsoft Bing, educators can elevate constructivist pedagogy, fostering enhanced student engagement, self-reflective metacognition, profound conceptual change, and an enriched learning experience. The article further emphasizes the preservation of humanistic values in the integration of AI, ensuring a balanced, ethical, and inclusive educational environment. This exploration sheds light on the transformative potential of inter-twining traditional educational philosophies with technological advancements, paving the way for a more responsive and effective learning paradigm.

Keywords: constructivism, Artificial Intelligence, teaching and learning methods, conceptual change

1. Introduction

“There is nothing so practical as a good theory.” Kurt Lewin

In the ever-evolving landscape of education, we find ourselves at a unique intersection of traditional pedagogical philosophy and cutting-edge technology. Constructivism, an age-old philosophy, emphasizes that knowledge isn't a mere transference of information, but an active construction by learners based on prior understanding and experiences. Enter the era of Artificial Intelligence – a technological marvel capable of personalizing, adapting, and enhancing teaching methods and the learning experience in harmony with constructivist principles. When wielded thoughtfully, artificial intelligence (AI) tools can take constructivist education to new heights, infusing it with deeper engagement, self-awareness, and conceptual clarity, all while safeguarding the quintessential human touch in learning. Dive with us into this profound exploration where pedagogical traditions meet technological innovation, redefining the essence of effective learning for the modern student.

1.1. Constructivist Philosophy

Constructivist philosophy of education emphasizes the active role of learners in building understanding by integrating new information with prior knowledge and firsthand experiences. This learner-centered approach aligns with intelligent tutoring systems and other AI applications that adaptively respond to students' existing mental models to promote deeper learning. Educators, often unknowingly, employ a range of artificial intelligence tools embedded in everyday software, such as Microsoft Word, as used in this article, information retrieval, and numerous other tasks. Teachers can now harness AI tools like ChatGPT, BARD, Microsoft Bing, and others, deliberately integrating them into constructivist pedagogy to bolster student engagement, metacognition, and conceptual change – all while upholding the humanistic values of education.

1.2. Active Learning Applications

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Constructivism argues that students derive meaning by interacting with the material, not passively receiving it (Abbott & Ryan, 1999). Similarly, machine learning techniques allow AI systems to construct knowledge from datasets. AI tutors use interactive simulations, personalized feedback loops, and open-ended environments to engage students in active discovery (Roll & Wylie, 2016). For example, an AI science tutor named Betty's Brain guides students to "teach" a virtual agent by constructing concept maps and simulating experiments, supporting hands-on learning-by-doing. Evaluations show Betty's Brain promotes hypothesis refinement, causal reasoning, and responsibility for learning (Blair et al., 2007). Such active learning applications are well-suited for constructivist instruction.

1.3. Adaptive Scaffolding

Central to constructivism is scaffolding tailored to the learner's current abilities, building up gradually to expand understanding (Abbott & Ryan, 1999). Similarly, AI can provide adaptive support through recursive refinement of student models. Intelligent tutoring systems continually estimate mastery based on interactions and dynamically adjust hints, feedback, and complexity (Anderson et al., 1995). For example, the DeepTutor AI system individualizes scaffolding and questioning strategies based on discourse analyses, helping students articulate explanations and misconceptions (Rus et al., 2013). Carefully scaffolded constructivist activities potentiate development within Vygotsky's zone of proximal development.

1.4. Metacognitive Reflection

Constructivism emphasizes metacognitive skills in monitoring and directing one's own learning (Teo & Zhou, 2017). Intelligent metacognitive tools leverage AI to develop these capacities. For instance, teachable agents prompt students to actively externalize their thinking and identify gaps, strengthening metacognitive control (Biswas et al., 2010). Reflective dialogues with AI tutors enable co-regulated learning, with the system modeling productive metacognitive strategies (Roll et al., 2011). Embedding explicit metacognitive scaffolds within AI activities can enhance outcomes and transfer (Davis & Linn, 2000). Integrating intelligent reflection support synergistically furthers constructivism's emphasis on self-regulated meaning making.

1.5. Conceptual Change

Constructivist theory highlights how students' naive theories and misconceptions resist change, requiring interventions targeting core beliefs (Vosniadou, 2013). Similarly, AI knowledge revision techniques overcome entrenched errors through paradigm shifts. For example, AI systems can model students' mental models based on historical data and generate counterexamples purposefully contradicting misconceptions (Li et al., 2011). Constructivist-aligned AI approaches use vicarious conflict, analogy, and explanatory models to prompt conceptual change, as evidenced in improved pre-post testing (Leelawong & Biswas, 2008). Such intelligent conceptual change support empowers the deep restructuring of the understanding constructivism promotes.

1.6. Preserving Humanism

Human-centeredness remains central to constructivist philosophy, prioritizing learner agency, dignity, and interpersonal relationships (Matthews, 2003). However, AI brings risks of dehumanization, data exploitation, and lacking ethics. Constructivist AI integration must intentionally design sociotechnical systems upholding humanistic values (Makridakis, 2017). Student data privacy and consent merits emphasis, as do inclusive designs considering diverse needs (Bennett & Foltz, 2019). Rather than autonomous tutors, mixed-initiative AI collaborators may strike an appropriate balance (Roll & Wylie, 2016). Regular ethical reviews, human oversight committees, and student feedback mechanisms can sustain human-AI partnerships preserving core educational values. The ultimate goal should remain developing the full humanity of learners.

2. Results

As educators, we're continuously at the crossroads of theory and practice. When we dive into the profound words of Kurt Lewin, "There is nothing so practical as a good theory," we uncover a new vista of possibilities for the world of teaching. Here's how the synthesis of theory and evolving AI technological tools might reshape our pedagogical strategies:

- **Personalized Learning Pathways:** With the union of constructivist principles and AI tools, teaching will no longer be a one-size-fits-all approach. Educators can design

personalized learning journeys, tapping into each student's prior knowledge and experiences, making learning more relevant and resonant.

- **Dynamic Curriculum Adjustments:** AI's adaptive capacities, coupled with the foundational theories of learning, allow real-time adjustments in curriculum. Educators can swiftly respond to a learner's evolving needs, ensuring that each student remains in their optimal zone of development and engagement.
- **Metacognitive Growth:** Emphasizing the active construction of knowledge puts metacognition at the forefront. With the aid of AI tools that promote reflection and self-awareness, teaching methods will emphasize helping students to “think about their thinking,” nurturing lifelong learners who are self-aware and self-regulating.
- **Empowering Conceptual Change:** Teaching will focus on uprooting misconceptions and nurturing deep understanding. By leveraging AI that identifies and challenges erroneous beliefs, educators can facilitate conceptual shifts, leading students from naive theories to profound insights.
- **Upholding Humanistic Values:** Amid the allure of AI and tech-driven pedagogies, the essence of teaching remains human-centric. Future teaching methods will emphasize building connections, fostering empathy, and cultivating a sense of community, ensuring that the heart and soul of education remain intact even in a technologically advanced classroom.

3. Conclusions

Constructivism and AI share common ground in their focus on active knowledge building, adaptive support, metacognitive development, and conceptual change. Thoughtfully designed and ethically vigilant integration of AI into constructivist pedagogy can potentiate more engaging, personalized, and transformative learning aligned with enduring humanistic imperatives. As we shape the future of education, we must leverage technology judiciously to expand minds, empower voices, and enlighten our shared humanity.

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Opinion Article

Promoting safe spaces: Creating Inclusive Educational Environments for Transgender Students

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Abstract: The goal is to create a unified education system that values all children, regardless of their caste, class, gender, sexualities, race, community backgrounds, ethnic backgrounds and abilities. The movement towards integrating children with disabilities into the regular classrooms started in the second half of the twentieth century. However, transgender students still face discrimination due to their gender and sexual identities. The Right to Education Act, 2009 guarantees universal education for all, and the Constitution of India mandates an inclusive society for all, including transgender persons. In recent years, the perception of the society towards transgender persons has changed, and transgender persons can lead a better quality of life if they have equal opportunities and access to social development services. Inclusive classrooms are important for trans, non-binary and Two-Spirit students, as they foster essential learning outcomes such as critical thinking and effective group work skills. This article will throw light on the identification of transgender students in schools, students are managing conflict situations in the schools, ensuring safety and security of transgender students in schools and some suggestive practices for teachers and school administrators.

Keywords: inclusive education, discrimination, transgender, counseling, curriculum

1. Introduction

The concept of education affords it to all human beings, irrespective of gender, caste, religion, etc. It gives knowledge, develops skills, it makes students to lead a successful life. In these circumstances transgender persons face barriers in their education due to the reinforcement of gender binaries in school structures, such as uniforms, use of toilets, participation in sports and extra-curricular activities, bullying and harassment for simply choosing to express themselves as opposed to social norms. These behaviours and expressions are seen as “normal” and are treated as acceptable, but those who do not conform to these binary roles, expressions, behaviour, etc., are made to feel as “abnormal”. This can lead to bullying and/or harassment, which can lead to discontinuation of formal education or a drastic decline in academic performances. Transgender face multiple layers of trauma and challenges in schools, such as coming to terms with their own sexuality, internal challenges and confusions, emotional, behavioural, physical trauma, violence, use of washroom, uniforms, mocking, bullying and teasing, and choosing a character/role in school play, games or other activities. (Dange et al., 2022) There is a lack of a nationwide database on transgender children and adults in India, but various sources have shed light on the vulnerability of transgender children in schools. It is important to understand these challenges and be sensitive towards them to create an inclusive space for each person.

2. Identification of transgender students in schools

Algorithm for identification of transgender students in schools include the following characteristics:

- The indications could be sociological, psychological, physical or behavioural;
- Observe why the student is reserved/highly reactive;
- In the clothing practices of the student;

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- While choosing a role in school play and the engagement in various school activities;
- Issues while going to the designated toilets like repeated mocking, bullying and teasing by fellow students;
- Being uncomfortable with certain peer groups;
- Uncomfortable while addressed in gender binaries.

It should be noted that this list of indicators is not exhaustive. These indications might be due to various other issues faced by the student within and outside the school environment. It is suggested that the teachers and other stakeholders interact with the student with extreme sensitivity while trying to understand the reason behind such behaviours.

3. General recommendations how to manage the conflict situation in schools

Schools administrators and teachers must follow the particular recommendations to manage the conflict situations. They refer to the following:

- Creating safe washroom facilities.
- Safe and secure residential facilities be developed for transgender children as per the need.
- Access to appropriate restroom and locker room facilities. School, where a transgender student has been given admission will have to ensure that if the child doesn't feel comfortable in any of the toilets (Boys/Girls) in the school, a toilet may be assigned exclusively for transgender students as there are multiple toilets in schools. In case there is a toilet for normal students that can also be shared by transgender students, if they feel comfortable. School administration can also ensure that the locker provided to transgender students is in a well-lit and visible area. (Dange et al., 2022).
- Maintain official records.
- Implement anti-ragging policies for the protection of transgender students.
- Establish counselling centres for students including transgender students in every school.
- Plan the physical education classes, intra-group sports and all inter-school activities to ensure the participation of transgender students.
- Specific provisions should be made for health care of transgender students.
- There is a need to create awareness programs in the school with the help of students and teachers. Community/parents sensitisation should also be planned by the school leaders, counsellors, etc.

4. Some Suggestive Practices for Teachers, Councillors, and School Administrators

4.1. Role of School Heads and Administrators

- Supportive administrators can support this work by addressing families of the transgender students directly.
- They should be open to hearing their questions, and be careful to distinguish questions or concerns from negative pushback.
- Inviting families/parents to a panel or film screening to discuss initiatives of diversity has helped many schools to involve families into this work, to address questions directly, and to identify which families in the school community are allies in this work as well.

4.2. Role of the School Counsellors

- Counsellors should be appointed in every school or should be available at a school cluster level who could be approached should the need arise.
- Counsellors should take counselling sessions and group guidance of life skills, communication skills, gender identity, professional development, personality development, motivational and career guidance on regular bases throughout the academic year.

- Counsellors must organise workshops for increasing awareness among the school community. They should motivate students as well as teachers to approach them if the need arise.

4.3. Suggestions for School Administrators for a Gender-Inclusive School Environment

- Outreach programmes through parent–teacher meetings and meetings with community leaders where discussions could be around gender diversity.
- There should be no discrimination on the basis of gender while appointing various academic, non-academic and house-keeping staff.
- Transgender teachers and other school personnel could be hired without gender-based discrimination.
- Include transgender category in application forms and in all types of certificates for courses in the educational institutions.

5. Conclusions

In school teachers, counsellors and administrators have a unique role in the lives of their students. They can play a major role in imparting gender education and ensuring that schools are not perpetuating discrimination based on gender identities. In many guidance counsellors, mentors, school monitors and principals consciously or unconsciously can reinforce marginalisation of transgender students, for example, by using language or behaviours that students may find disrespectful. There are many other barriers, which hinder effective teaching about gender, sexuality or violence in schools like teacher's confidence, competing curriculum priorities, perceived and real assumptions of gender diversity, limited training and resource availability. In this situation the school curriculum, which encompasses visible as well as hidden schooling practices can offer a world view which may seem to be real or imagined, familiar or strange when modified with a transgender inclusive perspective. When incorporated, such curriculums can help create a more positive, healthy and a less violent school environment. It would further help in the creation of a healthy self-concept of all students. Inclusive curriculum supports students' ability to empathise, connect and collaborate with the diverse group with diverse skills that are of increasing significance in our multicultural global society. Curriculum should provide students with opportunities to reflect on their own identities, including gender identity and expression, family diversity including transgender headed families, and the types of relationships they may want to build.

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