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IMPACT OF INTEGRATED CURRICULUM APPROACH ON STUDENT ACHIEVEMENT

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Abstract

The changing nature of knowledge in recent times is argued to be a key reason why educators need to consider curriculum integration. Curriculum integration is a curriculum design that repositions subject content through collaboration and experience in order to increase its meaning and relevance to students, holding less regard for disciplinary boundaries than traditional didactical approaches. The purpose of this research is to to study the effectiveness of Integrated Curriculum Approach on academic achievement and critical thinking among secondary school students. A qualitative approach adopted to study the effectiveness. The researcher reviewed different the research papers and formulated the conclusion.

Keywords: *Integrated curriculum, Academic achievement, Secondary, School, Students.*

Introduction:

The functions of education and learning have undergone profound transformation because of the drastic changes in the globe. To prepare students for the difficulties and opportunities of the modern world, education in the twenty-first century must encourage 21st century abilities like critical thinking, communication, teamwork, and creativity in addition to teaching conventional skills. Throughout a student's life, 21st century learning abilities can be applied

to all academic and multidisciplinary fields as well as civic situations. The term "21st Century Learning" is used to describe a form of education that does not rely on traditional

teaching methods or rote memorization but rather involves developing students' real-world skills to meet the demands and challenges of a constantly changing global economy.

Twenty-first-century learning embodies an approach to teaching that links content to skill. Its paradigm offers an opportunity to synergize the margins of the content with core concepts and makes learning more meaningful. Embracing a 21st-century learning model requires consideration of those elements that could comprise such a shift: creating learners who take intellectual risks, fostering learning dispositions, and nurturing school communities where everyone is a learner.

Thus integrating core concepts with key skills will prepare students for the workplace and college. We need to go beyond mile-wide and inch-deep coverage of ever expanding information in the classroom in order to achieve this. As a result, the teacher plays a crucial role in helping pupils in the classroom to acquire the necessary abilities. As rightly stated by Albert Einstein., "We cannot solve our problem with the same thinking we used when we created them". Therefore, it is imperative to have a new outlook towards curriculum planning and thus acclimatize new strategies of teaching methodologies into teaching and learning.

Interdisciplinary methods have been used in secondary schools in New Zealand as far back as the 1940s, while the 1970s and 1980s saw a spike in popularity for thematic methods in elementary schools worldwide. Paul Hirst and Basil Bernstein, two well-known and important English educators, argued on curricular integration in the 1970s. Bernstein advocated an integrated strategy that required "the subordination of previously insulated disciplines or courses to some relational idea". It was believed that connecting subjects using a relational idea may make studying more interesting for pupils and give them learning opportunities in real-world situations. Different subjects might offer different interpretations of a particular topic or problem. More recently, the idea of curriculum integration has re-emerged as one of the key themes of twenty-first century learning. In this context, curriculum integration is most often linked with inquiry learning.

What is Curriculum Integration?

> *Curriculum integration is like white light – a combination of all the different colors of the learning spectrum. These colors are useful and have their place individually, mix a couple together to make new understanding and all together in equal parts to produce the overall white light. White light is what you use to see clearly, an uneven mix will just eventually hurt your eyes.* *(Misty, Rua High)*

The meaning of curriculum integration varies from source to source, and schools and teachers integrate curriculum in different ways. James Beane, a prominent advocate for curriculum integration (1993, 1997, 2005), understands curriculum integration to involve meaningful learning organized around issues important to teachers and students; in this way, curriculum integration supports democracy (Beane, 2005). Beane outlined four aspects of integration that emphasize issues and align with democratic principles: integration of experiences, social integration, integration of knowledge, and integration as a curriculum design. Integration of experiences means that past and present experiences are integrated to facilitate new learning. Social integration occurs when students from diverse cultural perspectives enjoy common learning experiences. Integration of knowledge happens when content area concepts are integrated through a focus on issues. Integration as a design emphasizes project-based learning and other applications of knowledge (Beane, 1993). Beane (1997) anchored his concept of curriculum integration in his principles for middle schools, namely that curriculum should be general, and helpful for young adolescents exploring self and social meanings.

Curriculum integration "engages students as active learners who make the most of the decisions about what they study" (Brown, 2016, p. 123). Designed to be responsive to students' concerns, curriculum integration

allows for a model in which "students become teachers and teachers become learners" (Pate, 2013, p. 174). Springer (2006), a leading practitioner, further noted that "curriculum integration takes as its ultimate aim helping students live better lives now as well as in the future, not merely gathering more information for possible later use" (p.14). Similarly, Dowden (2007), writing about curriculum integration in Australian middle schools, stated that its main purpose is to "resituate subject matter into relevant and meaningful contexts" (p.52). Topics, themes, and issues that are meaningful for students can provide a starting point for curriculum integration (Jacobs, 1989; Nesin & Lounsbury, 1999).

Researchers, administrators, teachers, and teacher educators have interpreted curriculum integration in various ways. They also have used different terminology to describe their approaches because, as researchers and practitioners have noted, there is little consensus on what terms like curriculum integration, interdisciplinary curriculum, content integration, core curriculum, and multidisciplinary curriculum.

Rationale for Integration

As educators, we are constantly searching for new ways to help students make sense of the multitude of life's experiences and the bits and pieces of knowledge they gain from a traditionally departmentalized curriculum. Students today continue to move from one discipline to the next forcing the information to be disconnected to anything that resembles real life situations. To lighten some of the fragmentation our students and teachers experience, holistic and integrated curriculums are being proposed and adopted by many school districts. A major driving force behind integrated teaching and learning is the belief that when themes, subjects, or projects are combined students begin to see meaningful connections between the subject matter. Material then serves as a vehicle for learning rather than simply pieces of information.

For example, the connections between science and mathematics were made more apparent by scientific developments that took into account the orientations of value and the digitisation theories of mathematics. Mathematics and science integration is justified for several reasons (Ibrahim, 2002; Lee et al., 2011;Merrill & Comerford, 2004; Obaid, 2004). First, mathematics can be characterised by a high degree of abstraction; thus, the integration of science with mathematics represents an opportunity to provide real-life examples of mathematical principles. Second, mathematical concepts can be effectively used during science teaching in order to make scientific concepts more meaningful. Third, both mathematics and science rely on concepts, axioms, functions, theories, and practice; thus, there is a significant degree of structural consistency that allows for integration. Fourth, life situations tend to be characterised by a high degree of flexibility, which means that it is possible to integrate the concepts of science and mathematics in a logical sequence. Finally, there is a strong link between mathematical and scientific reasoning and other types of thinking, particularly creative, critical, and deductive thinking (Ibrahim, 2002; Lee et al., 2011; Merrill & Comerford, 2004; Obaid, 2004).

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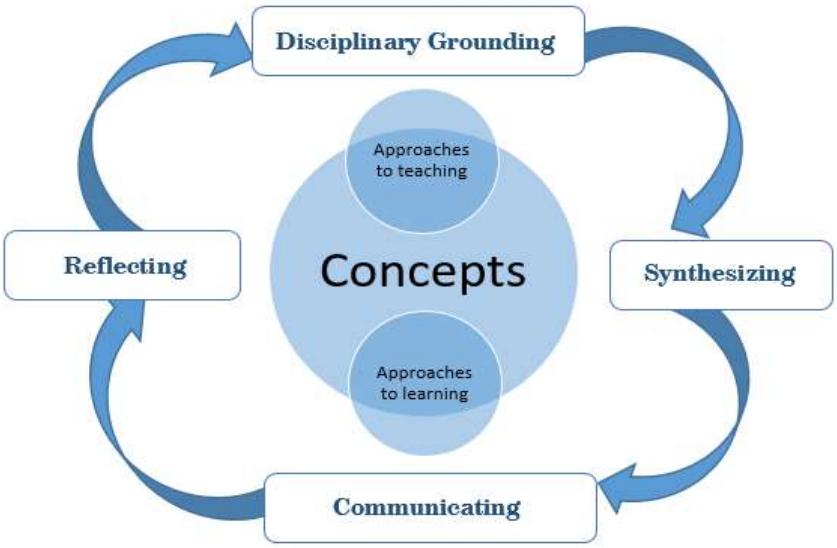
Ways to Integrate the Curriculum



Theorists have offered three categories for interdisciplinary work. They say integration is a matter of degree and method. The three categories include Multidisciplinary Integration, Interdisciplinary Integration and Transdisciplinary Integration.

Multidisciplinary Integration: Teachers who use this method focus primarily on the disciplines. They use a central theme, and standards from each subject are selected to support the theme. For example, a unit focused on geocaching that met standards in math, language arts, and science would be multidisciplinary.

Interdisciplinary Integration: The interdisciplinary approach supports standards from different subcategories in one subject area. For example, a unit that integrated reading, writing, and oral communication would be interdisciplinary. Another example might be a unit that integrated history, economics, and geography.

Transdisciplinary Integration: In the transdisciplinary approach, is organized around student questions or a real world topic. A common example of transdisciplinary curriculum is problem-based learning.

Conclusion

The review of the literature focused on research studies on curricular integration, with a specific emphasis on teacher attitudes, implementation, and student outcomes. Overall, there is substantial evidence that teaching using an integrated curriculum improves student learning, increases student engagement, and fosters a more positive attitude toward subject. However, looking at the multidimensional aspect of various research studies, the researcher could draw out certain important features.

Curriculum integration has been endorsed as a significant educational intervention by a number of themes that have been found in the research. Despite the fact that majority of the research were broadly looking at the aspects of implementation and thus it was only limited to the viewpoints and the attitudes of the educators. The key arguments in favour of curricular integration in the literature include relevance, readiness for the 21st century, its transformational potential, social skills, connections, and cooperation, problem solving and critical thinking, engagement, accomplishment, and time allocation.

Research and synthesis of the literature indicate that the integrated curriculum has three key features: consideration of the real world, authentic connections among content areas, and negotiation of content with students. These characteristics are excellent for assisting kids in learning 21st century skills.

However, successful practise and attainment of such skills may necessitate a redesign of curriculum that is conventionally compartmentalised and disconnected from real-world applications and relevant experiences of students.

The first outright benefit that an integrated curriculum has on students is 21st-century skill development. Today, the world is integrating almost everything where healthcare is receiving a boost from technology and history is helping financial analysts. Teaching related subjects in isolation no longer make sense.

Second, an integrated curriculum creates intrinsic motivation. A student may not be solely interested in learning physics but it has connected with chemistry or biology may seem interesting. Students who are intrinsically motivated to learn something show better performance than the group who learns just for the sake of education. Studies have shown that learning in an integrated curriculum has usually led to deeper knowledge retention.

Third, integrated curriculum directly helps in collaborative and communicative skill development. A professor in Florida, United States, found that her students reported better reading and writing comprehension when she changed her teaching strategy from lecturing about science to building wind and rain machines. The act of building something prompted students to communicate with each other, work in a team and develop their soft skills.

Lastly, students learning in an integrated curriculum has shown the capacity to think on a higher level. Integrated learning opens up the mind's imaginative potential by giving it a broader view.

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