## Foreword

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The overarching perspective of Voices in Education: Journal of Bermuda College is Student Success: A National Focus. For this second volume, the theme is "Transforming Education for the Twenty-First Century: New Thinking, New Action." On the island of Bermuda, as in other places, education is an essential pathway to success. Through education, students are equipped with the knowledge and skills that will enable them to complete tertiary education programmes and join the workforce. What skills and knowledge are required for such success in the 21st century, and how are they acquired?

In her editorial, "Transforming Education for the 21st Century: New Thinking, New Action," Marsick refers to several works that have delineated the skills required for success in this century. These skills include global awareness, literacy in multiple forms, critical thinking, communication, problem-solving, the ability to collaborate and work in teams, and creativity. Marsick adds that technological competence, being able to recognise patterns, and being able to extrapolate learning from one context to another are also essential skills. How are these skills acquired?

Our authors propose that such skills be cultivated at the earliest levels of education and are contingent upon pedagogy and educational approaches that encourage engagement, creativity, and critical thinking among our youngest learners.

Speir and Simmons emphasise that inquiry-based learning, which has been adopted as a model in preschool and early elementary education in Bermuda government schools, promotes the development of imagination and critical thinking. They state that such instruction is especially important in colonial and neo-colonial settings where education has historically not encouraged independent thinking. The success of inquiry-based instruction, they stress, is contingent on the use of abductive reasoning and a shift from teacher-centred didactic approaches to student-centred collaboration that fosters the construction of information by the students themselves.

Pedagogy is also significant to outcomes. It should inspire independent learning and critical thinking. Bishop describes an interdisciplinary approach to teaching music. He advocates inquiry-based and cross-curricular teaching approaches that encourage students to use their imaginations and be creative. In a study of students aged 5-6 years, Bishop finds that approaches which encourage independent thinking and creativity require greater interaction with, rather than intervention by, the teacher. He further correlates this approach with human rights education, which emphasises equality, dignity, respect, non-discrimination, and participation.

Paulau-Wolffe stresses that human rights education encourages the participatory creation of knowledge that leads to attitudinal changes and levels of activism in targeted areas. She offers the caveat that the success of human rights education depends on buy-in by school leadership and in teacher training.

Harney's article shifts the focus from teaching models to addressing individual needs. She offers a holistic mindbody approach to improving student success. The self-generation of coherence-patterning in the autonomic nervous system relative to teaching and learning is an important factor in student success. Evidence of the effectiveness of HeartMath exists in populations across age ranges, diverse backgrounds, and educational settings. Harney specifically describes the use of this approach in reducing maths anxiety and improving maths success as a particular example of HeartMath's potential.

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Colleges need to use technology to achieve instruction goals and also to prepare students in the appropriate use of such technology. De Shields notes that, in Bermuda, students expect technology to be used in class and prefer classes in which teachers use this forum. They also perceive the use of technology as enhancing learning.

The influence of the digital age is underscored in Hendrickson and Liles's review of *The App Generations: How Today's Youth Navigate Identity, Intimacy, and Imagination*, by Howard Gardner and Katie Davis. According to the reviewers, the book raises important questions about the impact of technology, specifically apps, on the psychosocial development of adolescents. It concludes that parents should provide modelling behaviour to support the appropriate development of youth, and that the use of apps must be incorporated in novel ways to maximise their benefit.

Marsick notes in her editorial that fewer college students are new high school graduates and more of them are mature learners with family and work responsibilities, and may be more dependent on online learning than in-class experience. She emphasises that colleges must strategically determine their structure and offerings in light of their target population and of employer needs in order to remain relevant.

In the same vein, Riley raises important questions about the future of education in Bermuda due to the declining population and the increase in the number of seniors. He admonishes educators to seek solutions to the prospect of school closures, to increase the number of males who seek advanced education, and to be creative in terms of increasing enrolment in tertiary education.

The move towards 21st century skills is rooted in appropriate pedagogy at the earliest levels of education that encourages students to think independently and creatively and to raise critical questions. This, coupled with enhanced use of technology and a grounding in human rights, will lead to student success. Finally, education in Bermuda must be relevant, and changes must be made to meet the needs of the island's population.