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The Benefits of a Multimodality Approach to Teaching and Learning

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Abstract

A multimodality or multisensory approach to teaching and learning is critical for teachers to best meet the needs of all students and their various learning styles. Knowing that there are multiple learning styles in any given classroom of students, information must be presented in various ways to best capture all styles. Students' who are auditory learners must hear data and information to learn best, visual learners benefit from Smart Boards and other assistive software technology, kinesthetic learners retain information from a hands on approach, including project-based learning. Teaching to all learners in a classroom must include presenting information in multiple ways. This paper looks further at the benefits of a multimodality approach to education. It also examines data from a special education school that speaks to significant improvement in academic achievement, motivation, and engagement when a multisensory/multimodality approach to teaching and learning is used.

Keywords: *multimodality, multisensory, learning styles, traditional, special education, differentiated instruction*

1. Introduction

Fortunately, the field of education and educators have evolved to recognize that learning takes many forms and is multisensory. According to Family Education, 20 to 30 percent of learners remember through hearing, 40 percent retain information visually, and the rest either have higher memory retention after writing something down or through real-life activities [1]. Knowing that there are multiple learning styles, no longer is the traditional approach of a lecture-based classroom considered to be most effective. The days of a teacher-centered classroom, one-size fits all model where an educator gives a lecture and students are passive learners who simply regurgitate information, is no longer deemed the most beneficial for retention and mastery of material. With teachers seeing a broad spectrum of diverse learners in their classrooms, differentiated instruction through a multi-modality/multisensory approach to teaching helps to meet the needs of all students. The end-goal may be the same for all learners, but the way in which it is achieved may vary. The approach to teaching may vary depending on the learning styles of the students.

2. Multimodality approach to teaching and learning

To shed insight on the different types of learning styles, I have chosen to focus on The VARK Modalities – Visual (V), Auditory (A), Read/Write (R), and Kinesthetic (K). While there is overlap between them and no set boundaries, Fleming and Mills (1992) suggested four modalities that represent students [2] and [3].

Visual Learners (V) prefer to see the information in which they are looking to learn. They best understand material that is presented visually, specifically using graphics. Charts, graphs, diagrams, maps, flow charts, hierarchies, etc., work best for visual learners. Whiteboards and Smart Boards are classroom tools that help visual learners best grasp and understand material [3].

For Auditory Learners (A), their preferred method of learning is when information is heard or spoken. Both lectures and group discussion – hearing and speaking - work best for this learning style. Often times Auditory Learners benefit from talking to themselves as it assists with executive functioning, organizing their thoughts as well as digesting material.

Read/Write Learners (R) prefer learning through words, whether through writing and/or reading. "Being able to write well and read widely are attributes sought by employers of graduates. This preference emphasizes text-based input and output – reading and writing in all its forms but especially manuals, reports, essays and assignments. People who prefer this modality are often addicted to PowerPoint, the Internet, lists, diaries, dictionaries, quotations and words, words, words… Note that most PowerPoint presentations and the Internet, GOOGLE and Wikipedia are essentially suited to those with this preference as there is seldom an auditory channel or a presentation that uses Visual symbols" [3].

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By definition, the kinesthetic/tactile (K) modality refers to the "perceptual preference related to the use of experience and practice (simulated or real). Although such an experience may invoke other modalities, the key is that people who prefer this mode are connected to reality, either through concrete personal experiences, examples, practice or simulation" [2, pp.140-141]."It includes demonstrations, simulations, videos and movies of "real" things, as well as case studies, practice and applications. The key is the reality or concrete nature of the example. If it can be grasped, held, tasted, or felt it will probably be included" [3]. This modality is suited for the individual who enjoys doing opposed to listening or seeing. Participating in a science lab in which students interact with one another and the subject material is tactile in nature. Hands-on discovery and learning is beneficial to kinesthetic/tactile learners.

3. Observation

Knowing that classrooms are filled with multiple children, we have to recognize that each child may learn differently. While one may learn best through auditory means, another may retain information better visually or kinesthetically or perhaps through reading or writing. Understanding this points out the need for a multisensory/multimodality approach to teaching. Through such an approach, material is presented in multiple ways, through different sensory modalities, in order to differentiate and best capture all learners in a classroom and help students understand and retain information.

Teaching to include one's learning style has multiple benefits including increased focus and motivation, more engagement in material, and enhanced achievement. There is no doubt that students who are more engaged and enthusiastic to learn perform better. More and more educators understand the importance of multimodality teaching and have adopted such methodology. It is the only way to ensure that the needs of all students are being met. In a k-12 classroom, a multimodality/multisensory teaching environment can take many forms.

At Summit View School in Los Angeles, California, a school that serves students with learning differences, project-based learning has been implemented across the curriculum. Project-based learning has naturally incorporated a multimodality approach. For example, in a science class, a project may be introduced via lecture, reinforced by way of visual display on a Smart Board, students could be up and actively engaging for group participation in the classroom or lab, and submitting a writing component and/or report to the teacher. Students in all subjects are given the option to present their information in a manner that best matches their learning style. For example, a student who feels most comfortable showing his or her mastery of the material through an oral presentation may do so, others may opt for a written report, while some may utilize the Smart Board or create a tangible project.

Seniors at Summit View are responsible for completing a culminating project that is multi-faceted and multimodal in its design and presentation. Summit View puts great emphasis on students understanding their strengths and weaknesses and being able to use their voices to enhance their potential for success. Students are asked to choose a public figure in society who has a learning need, style or challenge that matches their own. Students are grouped by their need/challenge as well as that of their chosen individual. In groups, students collectively learn more about their learning needs and style. From there, each student is responsible for creating social media pages for their individual - Facebook, Instagram Entries, Twitter Feed, LinkedIn Profile - as well as write a Times News Article about their person to further speak to who they are and provide biographical information. Students then present their projects orally and visually to the senior class. The final step is presenting the project to the entire school. The teacher presents the assignment in a multimodality/sensory manner and students do the same in their completion of it. This type of multimodality project is commonplace at Summit View and the increased motivation, engagement, and achievement is reflected in the higher grades, enhanced well-being of our students and more competitive college acceptances.

4. Conclusion

Knowing what we do about different learning styles, schools and educators have a responsibility to present material and opt for methodology that serves each and every student in a classroom. A multimodality/multisensory approach captures all learning styles and when opted for is proven to increase motivation, student engagement, and performance. The Vark Modalities must be kept in mind when creating and teaching curriculum across all grades and age levels. Teaching and learning is not one-size fits all. Whether one is a visual, auditory, read/write learner or kinesthetic/tactile learner, to not implement methodology that serves all is to short-change some.

References

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