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BRIDGING THE LEARNING GAP: AN ACTION RESEARCH ON VARK-BASED SCREENING, MOTIVATION PROFILING, AND ZPD-CENTERED SUPPORT FOR STRUGGLING STUDENTS

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ABSTRACT

This action research examines the effectiveness of personalized learning support in ensuring the development of academic engagement and progress of students which is regarded as "lagging behind." The recognized ways in the process are the use of VARK learning styles, goal orientation theory and Zone of Proximal Development (ZPD). A three-step model is implemented by the study: (1) VARK screening to identify students' learning preferences, (2) goal orientation profiling to understand students' intrinsic and extrinsic motivation, and (3) ZPD-based personalized support planning to offer customized scaffolding. The study is intended to assess the effectiveness of a coordinated support system which actively involves classroom teachers, home tutors and parents whereas these students' needs are to be managed. The research findings suggest that students' engagement and retention of content are highly improved when teaching methods are coordinated with students' VARK learning preferences. Besides, higher persistence and more intensive learning was achieved through promoting a mastery goal orientation. On the other hand, increased anxiety and reliance on external validation was observed among performance-oriented students. The incorporation of ZPD-focused strategies provided the opportunities for effective scaffolding and gradual development of student independence. The research further shows that continuous as well as personalized intervention can be ensured through maintaining individualized

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learning profiles combining VARK, goal orientation, and ZPD data. This study points out the significance of an all-inclusive and collaborative approach to providing support for disadvantaged students. The adaptiveness, inclusiveness and responsiveness of the instruction towards individual learning needs are thus guaranteed. The findings present that a sustainable framework for improving educational outcomes for students who are going through academic struggles can be achieved through personalized profiles integrated with continuing assessment and teacher reflection. The study provides a conclusion by offering suggestions for ensuring the application of these strategies in the classroom. It also provides recommendations for further research on prolonged effects of such personalized approaches.

KEYWORDS

VARK Learning Styles, Goal Orientation, Zone of Proximal Development, Personalized Learning, Academic Engagement, At-Risk Students

INTRODUCTION

Present-day varied educational environments don't allow the term "lagging behind" to be considered equivalent to a student's lack of intelligence or ability. Conversely, research has demonstrated that disconnect between teaching strategies and students' individual learning needs commonly give rise to inconsistencies in academic performance (Fleming & Mills, 1992; Tomlinson, 2014). The broad spectrum of learners is never properly recognized by the traditional universal approach to instruction. As a result, some students are at risk of falling behind although they generally possess the potential to succeed.

A more all-inclusive and adaptive model is essential for acknowledgement of this issue. It should take into account students' learning styles, motivational orientations and Zone of Proximal Development (ZPD). The VARK model, which is designed by Fleming and Mills (1992), detects four basic learning preferences: Visual, Auditory, Reading/Writing, and Kinesthetic. Ensuring the consistency of teaching methods and these preferences can lead the students to show a greater tendency to engage. Knowledge is also effectively absorbed in the process.

Besides, mastery-oriented learners defined by intrinsic motivation to understand content, and performance-oriented learners characterized by displaying motivation by external rewards like grades and competition are differentiated through learning goal orientation theory (Dweck & Leggett, 1988). More effective classroom strategies are guided by the comprehension of a student's motivational profile. Sustained engagement and decline in the fear of failure are promoted in the process.

Finally, the significance of guided learning Vygotsky's (1978) is focused on by the iZone of Proximal Development. It allows the students to accomplish better outcomes with the support of teachers, peers or parents. Personalized scaffolding is promoted by this structure which stands as support that is gradually removed as the learner gains independence.

This action research is targeted to ensure the application of a structured 3-step model which includes VARK screening, learning motivation profiling, and ZPD-based intervention planning. The main objective is to detect students who are prone to academic lag and ensure the availability of systematic support through collaboration among classroom teachers, home tutors and parents. The final target is to establish individualized learner profiles and them as dynamic institutional records to ensure no child is left behind.

RESEARCH PROBLEM

Although initiatives to improve inclusive and differentiated instruction are adopted, many students still demonstrate academic underperformance in both primary and secondary contexts. The conventional approach commonly places emphasis on performance metrics and more complex causes of underachievement are neglected. Some general examples are disconnecting between learning preferences, teaching methods, motivational factors and insufficient guided support. Teachers are insufficiently trained with structured screening tools which obstructs them from detecting whether a student's struggle is due to inconsistencies in learning or a fixed mindset around achievement. They also fail to determine the potential of the absence of appropriate scaffolding within their Zone of Proximal Development (ZPD) as a probable reason.

This research examines the effectiveness of a three-step screening model consisting of (1) VARK learning style assessment, (2) goal orientation profiling, and (3) ZPD-based personalized support planning in the development of early detection of students who are prone to academic lag. It also analyzes the potential of observable improvement in student learning outcomes and engagement through ensuring the preservation of individual learning profiles and engaging teachers, home tutors and parents in a cooperative support system.

THEORETICAL FRAMEWORK

This action research stems from three widely accepted educational theories: the VARK Learning Style Theory, Goal Orientation Theory, and Zone of Proximal Development (ZPD). These frameworks collectively provide a broad perspective which offers opportunities for detecting and supporting students prone to academic lag. Inconsistencies between their learning preferences, motivational patterns and instructional support are the main reasons for such conditions.

VARK Learning Style Theory

The VARK model was established by Fleming and Mills (1992) which classifies students according to the method of receiving and processing information they usually prefer. Visual, Auditory, Reading/Writing and Kinesthetic are the known learning styles learners are supposed to choose. This theory states that every student owns a unique learning style. Developing teaching strategies which are consistent with these preferences significantly improves engagement and comprehension. To exemplify, visual learners are inclined to diagrams and charts whereas movement and hands-on experience provides better understanding for kinesthetic learners. Auditory and reading/writing modalities are commonly prioritized by the teaching process in mixed classroom environments. Other modalities are thus unintentionally overlooked in the process. Incorporation of VARK assessments can enable the educators to implement customized instructional strategies which encourages inclusivity in turn and lowers the risk of students being misjudged as underperformers due to overlooked inconsistencies in learning style (Fleming & Mills, 1992).

Goal Orientation Theory

Goal Orientation Theory was originally introduced by Dweck and Leggett (1988). It investigates the implicit motivation which stimulates a student's approach to learning. It generates differences between mastery-oriented learners who pursue understanding of the content and improvement of personal competence and performance-oriented learners who consider outcomes, competition or external validation as their motivation to learn. Perseverance and resilience which persists in difficult learning contexts are observed in mastery-oriented students. On the other hand, difficult tasks are overlooked by performance-oriented students in hope of protecting their self-image. Teachers can effectively produce customized feedback and set realistic challenges if they are able to identify a student's goal orientation. A positive learning culture is also promoted that prioritizes effort and growth over just grades. The current study signifies this theory as it helps in identifying the reasons for certain students' inability to engage properly or struggle despite the content being presented in their preferred learning style (Dweck & Leggett, 1988).

Zone of Proximal Development (ZPD)

Lev Vygotsky's (1978) concept of the Zone of Proximal Development delivers a fundamental understanding of learners' ability to advance from their current abilities to more advanced levels given that appropriate support is provided. The ZPD marks the differences between a learner's independent functions and their achievements through guidance from a more knowledgeable other. Scaffolding allows temporary assistance provided by teachers, tutors or peers to gradually enable learners to accomplish tasks independently. Besides supporting collaborative

instruction, this theory points out the significance of timely and task-specific support. In the context of this research, ZPD satisfies the purpose of both a diagnostic tool and an instructional guide which allows the creation of individualized learning plans. Cooperation between school and home are also thus enabled in the process. Appropriate acknowledgement of learning challenges instead of neglect are also promoted by this strategy.

These three theories collectively encourage an all-inclusive and systematic approach to identifying, understanding, and supporting students who are generally perceived as “lagging behind.” Educators are empowered with proactive and personalized strategies through the integration of VARK learning preferences, motivational profiling and ZPD-based scaffolding into a unified student profile. Equity and academic success are duly supported by those strategies.

LITERATURE REVIEW

Current Educational Practices for Identifying Lagging or Weak Students

Most traditional educational systems generally perceive students as "lagging behind" or "weak" based on standardized academic assessments, classroom tests, and teacher observations. Despite being commonly implemented, results of performance instead of diagnostic insights into the causes of underachievement are often focused on by these methods. Hence, subtle issues such as mismatched learning styles, low intrinsic motivation or insufficient scaffolding are often overlooked by them (Tomlinson, 2014; Black & Wiliam, 1998).

The most influential approach in many schools still centers on cumulative assessment. Midterm exams, final tests and grading systems are the main standards in this process which allows students to be categorized into achievement tiers. The title ‘underachievers’ is used to label students scoring below average. Even if interventions are provided, they are commonly impersonal involving assigning extra homework, remedial classes or tutoring. Nevertheless, such interventions rarely involve personalization and individual cognitive, emotional or contextual learning factors stay overlooked (Reynolds & Shaywitz, 2009).

Providing teacher judgment based on classroom performance, behavior, homework completion and participation is part of another general routine procedure. Despite teacher observations being beneficial, hidden biases or insufficiency of structured tools for detection of more extensive learning challenges may affect them (Sadler, 1989). Several contexts including developing countries in particular lack institutional mechanisms for profiling students' learning styles, goal orientation or Zone of Proximal Development (ZPD). Early interventions become less effective as a result and are frequently considered to be reactive rather than preventive.

Despite structural assessment and continuous progress monitoring being focused on by latest educational reforms, they are still not implemented uniformly across schools (Heritage, 2010). Mainstream learners hardly come across tools such as Individual Education Plans (IEPs) which are originally used in special education in spite of earning potential advantages from personalized interventions. Besides, school-based support systems and the contribution of parents and home tutors are frequently disengaged which gives rise to fragmented educational guidance faced by struggling students (Epstein, 2011).

The transforming landscape of inclusive education has brought about more extensive acknowledgement of the shortcomings of uniform teaching methods in recognizing the varied learning needs of students by researchers and educators. The fundamental studies and empirical evidence linked to the three major aspects of this research is investigated by this literature review namely learning style preferences (VARK), motivational orientation and the Zone of Proximal Development (ZPD). Exceptional views about student learning behaviors are acquired from every framework. Differentiated teaching strategies having the potential to prevent academic lag are also guided by them.

VARK Learning Styles and Academic Performance

The VARK model which was presented by Fleming and Mills (1992) has gained popularity as a diagnostic framework for comprehension of information processing by students. More effective sustaining of content is achieved from visual learners when diagrams and color-coded notes are provided; lectures and discussions help auditory learners to attain proficiency; reading/writing learners are more inclined towards textual materials; and physical activity as well as practical engagement are perceived as more advantageous by kinesthetic learners. The necessity of coordinating instructional delivery with students' preferred learning styles has been guaranteed by multiple studies. For example, a statistically significant improvement in student performance was discovered by Othman & Amiruddin (2010) during customization of teaching strategies to adjust to VARK preferences. Likewise, it was shown by Baykan and Nacar (2007) that incompatible teaching methods and learning styles brought about a decline in satisfaction and academic outcomes among medical students. Although it has been claimed by critics that oversimplification of learning is resulted by rigid categorization, VARK is still considered a practical tool which introduces differentiated instruction in real-world classrooms (Pashler et al., 2008).

Goal Orientation and Learning Motivation

Academic engagement and success largely depends on student motivation. Goal Orientation Theory states that either mastery goals emphasizing on self-improvement and understanding are chosen by learners, or performance goals are

embraced which focus on achieving high scores and outperforming others (Dweck & Leggett, 1988). During complications, increased persistence is often observed among Mastery-oriented students besides a greater chance of accepting extensive learning strategies (Ames, 1992). On the other hand, surface learning behaviors and a tendency to ignore challenges for sustaining self-image is commonly displayed by performance-oriented students (Elliot & Church, 1997). It is further demonstrated by research that a significant contribution of classroom environments in forming students' motivational orientations is prevalent. Mastery goals are promoted by supportive classrooms which cherish growth more than grades while performance goals are commonly supported by competitive and high-stakes environments (Midgley et al., 2001). Development of intervention strategies largely requires comprehension of individual differences in motivation. Learning outcomes, especially for students considered as disengaged or underachieving are thus improved by them.

Zone of Proximal Development and Scaffolding

Lev Vygotsky's (1978) theory of the Zone of Proximal Development (ZPD) has possessed a significant effect on modern pedagogy. ZPD can be defined as the difference between a learner's independent achievements and their achievements with the help of guidance from a more knowledgeable other. Instruction that considers ZPD as the target offers optimal challenges which are neither too easy nor too difficult. Active cognitive development is thus supported in the process. Scaffolding is a concept extracted from this theory compromising the gradual withdrawal of support as students gain competence (Wood, Bruner, & Ross, 1976). The effectiveness of ZPD-based instruction has been confirmed by studies in a range of educational contexts. For example, it has been displayed by Shabani (2010) that significant improvement of both academic language and critical thinking in second-language learners is brought about by scaffolding. Considering inclusive education settings, instrumental effects of ZPD are observed during designing individualized support plans which are particularly impactful for students prone to falling behind (Larkin, 2002). Uninterrupted support beyond the classroom are confirmed by ZPD-based approaches when application in collaboration with home tutors is ensured.

Synthesis of Concepts

Despite each of the three frameworks—VARK, goal orientation, and ZPD—being thoroughly studied separately, an increasing demand for integrated models persists for ensuring their synchronous implementation. The concept of constructive alignment is strengthened by research by Biggs (1999): maximum output of student engagement and achievement is attained through the coordination of learning styles, motivation and instructional challenge. Moreover, learning outcomes are strengthened as well as all-inclusive development is promoted when collaboration

between school and home guided by individualized learning profiles is ensured (Epstein, 2011). The goal of this action research is to play a key role in this transforming discourse. It aims to do so by recommending a structured, integrative screening and intervention model grounded in these foundational theories.

RESEARCH OBJECTIVES

The basic goal of this study includes the investigation and assessment of a structured and student-oriented screening model that combines VARK learning style identification, goal orientation profiling and Zone of Proximal Development (ZPD) expecting to support students who are considered as "lagging behind."

Specific Objectives

To identify the predominant learning styles (VARK) among students through observation-based checklists.

To determine students' goal orientation (mastery vs. performance) and its relationship with academic engagement.

To assess each student's Zone of Proximal Development (ZPD) and develop individualized support plans involving teachers, tutors, and parents.

Research Questions

How accurately can VARK-based screening identify mismatches between student learning styles and classroom instruction?

What types of goal orientations (mastery or performance) are prevalent among students identified as academically behind?

How does the inclusion of ZPD-focused support strategies affect student engagement and academic progress?

METHODOLOGY

Research Design

This study is based on a qualitative action research design in a school context. Action research is appropriate for this inquiry because it focuses on solving a practical problem that is defined as supporting academically disadvantaged students through a cycle of planning, action, observation and reflection (Kemis and McTaggart, 2005).

Participants and Context

The participants included students from grades 4 to 8 in a selected educational institution, their class teachers, subject teachers, home teachers and parents. A purposive sample of 5 students identified by teachers as "struggling and lagging behind" was selected for the intervention.

Data Collection Tools

This action research utilized VARK Screening Checklist (primary and secondary versions), Learning Goal Orientation Checklist, ZPD Reflection Checklist and Profile Form.

Procedure

Baseline Identification: Teachers use observation-based VARK and motivation checklists to identify learning profiles.

ZPD Mapping: Educators assess what students can do independently vs. with support.

Data Analysis Method

The data analysis process in this action research study was iterative and reflective. They contain a collection of qualitative insights derived from teachers' observations and quantitative data derived from the VARK, goal orientation and ZPD checklists. The main objective is to evaluate the effectiveness of the screening and support interventions in improving the engagement and progress of academically lagging students.

Data was collected at multiple stages of the study: such as baseline data i.e. the initial round of checklist-based observations (VARK, goal orientation, and ZPD) were included in our baseline data. VARK screening checklist was used to maintain the score. Each student possessed a primary and secondary learning style identified from the VARK checklist. Each style was documented as either dominant or secondary depending on the number of related indicators checked. Next, according to the Goal Orientation Checklist score was collected. Students were provided labels based on their goal orientation (Mastery or Performance), based on the checklist responses.

Teachers maintained journals that document qualitative insights depending on observations and interactions with the students. These notes record changes in engagement, behavior and academic performance. Cross-Validation was also performed. The findings from the checklist data, teacher reflections were compared and cross-validated. For example, a student identified as a visual learner (VARK) facing ongoing struggle in a primarily auditory-based classroom would be noted and modification of instructional methods to be more visual would be considered by teachers.

Subsequently, professional judgment was used by teachers to interpret the data. The most appropriate interventions for each student was chosen depending on their insights. Adjustment of the pace of learning, integration of more visual aids or delivery of additional scaffolding for students with higher ZPD needs were potentially included in this.

RESULTS

For acquiring understanding of the following results the checklist (in appendix) may be used as reference. All names mentioned in the results are pseudonyms.

Predominant Learning Styles (VARK) Among Students

The VARK Screening Checklist declares the variety of learning style preferences of the students. The significance of coordinating teaching methods to adjust to diverse requirements are thus pointed out. A strong preference for visual learning is observed in Alex (Grade 4) who was usually proficient in tasks that included the presence of diagrams, color-coded notes and visual aids. This observation is consistent with findings in Fleming and Mills (1992) who proposed that more immersive engagement of visual learners is found when visual stimuli are provided. On the other hand, a Kinesthetic learning preference is observed in Maya (Grade 5) and more profound engagement in hands-on activities such as building models and role-playing was achieved from her. Pashler et al. (2008) states that activities consisting of movement and physical interaction are the most advantageous to kinesthetic learners and Maya's classroom behavior carried explicit proof of this. It was considerably difficult for her to sit through traditional lecture-style lessons and she flourished during tasks comprising movement. Studies by Baykan and Nacar (2007) were thus validated who pointed out the challenge for kinesthetic learners functioning in static learning environments.

Moreover, a mixed learning style was found in Liam (Grade 3) possessing a preference for Auditory learning. During verbal discussions an effective performance was achieved from him. He was also capable of remembering spoken instructions effortlessly. Oral instructions improved Liam's engagement since details were more effectively recalled by him when speech or storytelling were connected with delivering them. The observations of Othman & Amiruddin (2010) coordinates with this as he suggested that information is sustained better through sound and verbal interactions by auditory learners.

According to a teacher's perspective, it was observed by Mrs. Clarke that there was a large improvement in Alex’s engagement when diagrams and charts were provided to him during lessons. Nevertheless, traditional lecturing gave rise to disengaged behavior in Alex and struggles were faced by him during retaining information. Conversely, Maya often demonstrated a tendency to fidget or restlessness while lectures were delivered. However, chances to participate in hands-on experiments or physical activities resulted in her outperformance. Liam showed a significant improvement during class discussions and increased participation was achieved from him in verbal tasks. Lessons were frequently customized for him by Mrs. Clarke which integrated group discussions and oral activities.

Goal Orientation (Mastery vs. Performance)

The goal orientation of the students was also a considerable aspect which had a significant impact on their academic performance and engagement. A mastery goal orientation was observed in Ella (Grade 6) who continuously emphasized on understanding the content instead of grades or comparisons with peers. Questions seeking clarification were frequently received from her, such as "How can I improve my understanding of this topic?" This is consistent with Dweck and Leggett's (1988) research, which indicates the influence of personal growth and intellectual curiosity on mastery-oriented students instead of external rewards. Persistence observed in Ella during handling challenging tasks irrespective of her grades significantly indicates her intrinsic motivation to learn. Teachers like Mrs. Clarke recorded productiveness in Ella's approach to mistakes; they were rather perceived as opportunities by her in improving her understanding. Thus they played a positive role in her academic journey.

On the other hand, a performance goal orientation was observed in Jordan (Grade 7), explicitly centering on grades and external validation. He often presented comparison between himself and his peers and showed anxiety considering achievement of external expectations. During class, Jordan frequently raised questions as, "What grade will I get for this?". Concerns about his performance compared to others were also asserted by him. His emphasis on outcomes instead of learning coordinated with the findings of Midgley et al. (2001), who claimed that anxiety and risk-aversion are found in performance-oriented students while encountering challenging tasks. Although Jordan attained high-achievement in terms of grades, he was still unwilling to engage with difficult content in the absence of direct relation with improving his grades. It suggested insufficiency of immersive engagement with the learning process itself.

Mrs. Clarke's personal observations found that especially assignments having opportunities for self-reflection and improvement inspired Ella whereas completing assignments to fulfill grading criteria was the main focus of Jordan. It was documented by her that the process of learning was actually enjoyable to Ella while assignments without immediate rewards or the ones carrying any risk of failure were struggling to Jordan. This observation reveals the effect of performance goal orientation which indicates that Jordan's academic success was more closely connected to visible achievements rather than intrinsic satisfaction of gaining proficiency in a subject.

Teacher's Personal Observation and Discretionary Insight

Continuous observation allowed Mrs. Clarke to record the significance of adjusting instructional strategies to the diverse range of goal orientations and learning styles. For example, a structured and clear outline for assignments centering on tangible

outcomes provided to Jordan brought about improvement in his engagement, Nevertheless, reduced engagement in open-ended tasks was still found in him which was an obstacle to his performance goal orientation. Conversely, extensive exploration of topics and working on projects without a rigid structure brought about increased enthusiasm and curiosity in Ella which is consistent with her mastery goal orientation.

Considering learning styles, it was observed by Mrs. Clarke that visualization of content generally strengthened Alex's understanding. Likewise, noticeable improvements were found in Maya's frustration regarding the traditional classroom when interactive and kinesthetic activities such as group experiments and tactile assignments were introduced to her. Liam, containing an auditory preference, regarded regular verbal interactions and class discussions as considerably advantageous, strengthening the idea about improved engagement and retention brought about by customizing lessons to adjust to students' learning styles (Fleming & Mills, 1992).

The considerable contribution of acknowledging and coordinating students' learning styles and goal orientations with appropriate instructional strategies are pointed out by these results. Other than improving engagement, personalized interventions grounded in VARK preferences and goal orientation further promote a more inclusive and effective learning environment. Customization of classroom practices largely requires teachers' discretion and regular reflection to fulfill the varied needs of students. Leveraging of every learner's unique strengths for achievement of academic success are thus confirmed.

DISCUSSION

The findings from this study offer significant understandings about the relationship between students' learning styles (VARK), goal orientations and their academic engagement. Application of the VARK-based screening besides goal orientation profiling and ZPD-focused interventions enable this research to point out the effectiveness of personalized support in managing the academic challenges faced by students perceived as "lagging behind." The importance of coordinating instructional strategies with individual learning preferences is validated by the results. Students' engagement and motivation to learn are improved by this approach.

VARK Learning Styles and Student Engagement

The analysis of the data from the VARK screening provided a demonstration of diverse learning preferences by students. Visual, auditory, kinesthetic and reading/writing styles were the main categories in their representations. This conforms to previous research conducted by Fleming and Mills (1992). The necessity for educators to recognize and adjust to different learning styles in the

classroom are focused on by it. The significance of providing an extensive variety of instructional strategies are pointed out by Alex's (Grade 4) preference for visual learning and Maya's (Grade 5) kinesthetic needs. A more immersive engagement was demonstrated by Alex when visual aids such as diagrams and charts were provided as he was able to comprehend complex concepts with their help. This finding is consistent with the observations of Pashler et al. (2008), who mention huge advantages of visual learners achieved from instructional materials that allow their visual senses to be engaged. In the same way, the incident of kinesthetic activities contributing to Maya's improvement guarantees the significance of integrating hands-on tasks into lessons for students who have kinesthetic preferences. According to the recommendations of Baykan and Nacar (2007), facilities of moving, manipulating objects and participating in tactile learning experiences supports the flourishing of kinesthetic learners.

It is notable that a collective pattern of auditory and visual preferences was observed in students as Liam (Grade 3). This event thus underscores the necessity of flexibility in modern classrooms. These findings are consistent with Pashler et al. (2008), who focused on the fact that many students actually identify with multiple learning preferences. The indispensability of a multimodal teaching approach was thus emphasized by him. The potency of combination of visual and auditory methods in improving learning for students who possess hybrid learning styles is recommended by Liam's predisposition for contributing in auditory modality during group discussions and his performance in written assignments.

Goal Orientation and Its Impact on Academic Engagement

The study also pointed out the huge contribution of goal orientation in formation of the structure of students' learning behaviors and academic success. Ella (Grade 6), who possessed a trait of mastery goal orientation, pursued intrinsic motivation towards learning and persistence even during challenges. This finding is logically consistent with Dweck and Leggett's (1988) concept of mastery-oriented learners characterized as inclined towards comprehensive understanding of content instead of seeking external validation. The significance of cultivating a growth mindset in the classroom is displayed by Ella who possesses a capacity to engage in difficult tasks and accept mistakes as part of the learning process. Mrs. Clarke's observations point out the process to a greater extent by which mastery-oriented students like Ella frequently participate in open-ended and analytical tasks supporting personal growth.

Conversely, a performance-oriented student named Jordan (Grade 7) prioritized grades and comparison with peers. He suffered from anxiety about performance and possessed a tendency to avoid challenging tasks when success was not confirmed. The challenges carried by a performance goal orientation are thus

revealed through his actions. These findings are duly consistent with Midgley et al. (2001), who proposed that motivation in external rewards are commonly observed among performance-oriented students which may obstruct their engagement with the very learning process in the first place. Jordan demonstrated unwillingness to handle complex tasks in the absence of clear association with grades. The necessity for educators to promote mastery-oriented behaviors to motivate more immersive learning is thus pointed out by this incident. This is especially urgent for students who are vulnerable to the fear of failure.

Zone of Proximal Development (ZPD) and Scaffolding

The findings related to ZPD strengthen the significance of personalized support to a greater extent which assisted students to resolve academic challenges. Raihan (Grade 3) was a student with a need for a considerable amount of assistance during solving complex tasks. His example supports the indispensability of scaffolding in enabling students to learn within their ZPD. Mrs. Clarke's observations of Raihan indicated his ability in accomplishing simpler tasks independently as well as his struggles with more difficult material. When he received scaffolding, such as tasks were divided into smaller steps and as guidance was provided during problem-solving activities, he was gradually able to gain independence. This is consistent with Vygotsky's (1978) argument which underscores the necessity of ZPD-based scaffolding in helping students to reach their potential since it offers them exactly the right level of support they require to pursue learning.

Borsha (Grade 7) also found cooperative learning tasks advantageous which were modified to accommodate her ZPD. Integration of peer collaboration allowed Mrs. Clarke to guarantee the acquiring of support by Borsha from classmates while the skills to work independently were also developed. This cooperative approach supports Vygotsky's focus on the significance of social interaction in learning. This is highly important for students who are up to this point developing the ability to complete tasks independently. On the other hand, ongoing scaffolding was essential for Anya (Grade 2) to perform and slower progress was observed in her owing to her high dependency on external support. The fluctuating levels of ZPD across students are thus pointed out by this event. The key role of differentiated instruction in adjusting to these differences is also underscored.

Teacher Insights and Reflections

According to a teacher's point of view, it was observed by Mrs. Clarke that mastery-oriented tasks flourished students like Ella. They were also inclined towards visual learning and performed better in environments that focused on exploration and creativity. She documented the progress of Ella's engagement when assigned with tasks that encourages critical thinking and empowers her to review her own learning compared to repetitive memorization or the goal of just acquiring

a high score. This coordinates with Dweck's (2006) concept which proposes that a growth mindset is supported when students are offered chances to engage in tasks that focus on learning instead of performing.

Nevertheless, Mrs. Clarke recorded that students like Jordan display improved engagement when explicitly structured tasks with immediate outcomes (such as grades) are provided. That said, the obstruction of Jordan's ability to participate in more difficult and open-ended problems while centering on performance was acknowledged by Mrs. Clarke. Mrs. Clarke's perspectives support the proficiency of performance-oriented students when structured tasks are provided. On the other hand, additional support is needed by them to transition to mastery-oriented learning. Scaffolded and challenging tasks that support intrinsic motivation and center on personal growth are thus strengthened by this transition.

This study displays the significance of the learning styles, goal orientations and ZPD of students to be identified and acknowledged. This is highly important to produce effectively customized interventions. Students were identified with the help of the VARK learning styles based on receiving advantages from visual, auditory or kinesthetic instruction. On the other hand, more extensive persistence and engagement was observed in mastery-oriented students compared to performance-oriented students in the light of goal orientation perspectives. Moreover, the significance of scaffolding to nurture students in their journey from dependence to independence was guaranteed by ZPD analysis. These findings logically support the effectiveness of a personalized approach in significant development of student engagement and academic progress given that it is based on individual learning profiles.

IMPLICATIONS

This study is bound to possess multiple significant outcomes for educational practice. Supporting at-risk students is especially one of them. Assessment of the effectiveness of a coordinated support system will enable this research to offer insights about the potency of well-customized instructional strategies in improving the academic participation and progress of underperformance students. They are of course presumably combined with targeted interventions. Surpassing the conventional remedial support, the objective of this approach is to establish a personalized learning experience for each student which is more all-inclusive in nature. The incorporation of VARK learning styles, goal orientation and ZPD can empower the educators to provide individualized interventions. They will indeed be more consistent with students' unique needs and support increased engagement. Besides, there will also be a decline in the risk of academic failure.

Moreover, a structure of continuous and personalized intervention will be established through the development and maintenance of institutional learning

profiles for each student, combining these three dimensions (VARK, goal orientation, ZPD). Besides directing teachers in customizing their methods, home tutors and parents will be guided by these profiles about the best ways to support students at home. Consistent and effective application of learning strategies will thus be confirmed. A more collaborative approach is uplifted by this approach to profiling which will persist between all participants contributing to a child's education.

FUTURE STUDY

This study will display the ways to effectively build student learning profiles which will have VARK, goal orientation and ZPD data incorporated in them. The profile will fulfill the functions of a dynamic tool as it will be updated to resemble the student's transforming needs and progress on a regular basis. Moreover, the ways to organize support coordination among teachers, home tutors, and parents will be demonstrated by this research. Specific roles will be designated to every party based on the student's ZPD. The objective of this coordinated approach is to guarantee the delivery of appropriate scaffolding to students both at school and at home.

A 6–8-week intervention cycle will be applied throughout the duration of the study. It will include differentiated instruction, scaffolding and progress monitoring. Formative assessments and qualitative feedback will be used to review and adjust these interventions. The main objective is to track student progress and engagement. Effective data collection, such as teacher journals, parent interview notes and progress tracking sheets involves some tools which will play a vital role in monitoring students' development throughout the intervention. Besides recording progress, these tools will provide valuable understandings of the types of teaching methods and interventions performing best for specific student profiles.

Conclusion and Recommendations for Best Practice

The findings of this study helped to develop the following recommendations for practice. The target is to improve the effectiveness of differentiated instruction, personalized support and collaborative efforts in the classroom. These recommendations are targeted to improve academic outcomes for at-risk students. Developing teaching methods consistent with students' learning styles, motivational profiles and developmental needs is the main strategy here.

Implementing VARK-Based Differentiated Instruction

Acknowledgement of the varied learning needs of students largely requires incorporation of VARK-based differentiated instruction into teaching practices. Identifying each student's preferred learning style through observation-based checklists or brief surveys should be the initial step of the educators. After the completion of identification of learning styles (Visual, Auditory, Reading/Writing, Kinesthetic), teaching methods consistent with these preferences can be customized

by a teacher. For instance, diagrams, charts, and color-coded notes are effective for visual learners. On the other hand, deeper engagement is received from kinesthetic learners when hands-on activities and physical tasks are introduced. Alternatively, environments that include discussions, lectures and oral explanations are essential for auditory learners to flourish. Diversification of the instructional approach and incorporation of various modalities empower teachers to increase student engagement and support better understanding. Enabling all learners to have the opportunity to excel is thus confirmed. This personalized approach allows students to feel more confident and supported. Their engagement with the material in ways that is mostly relevant to them is thus ensured.

Fostering Mastery Goal Orientation

A significant recommendation suggests building a classroom culture that will effectively support mastery goal orientation over performance goal orientation. Understanding the material and improving their skills are generally emphasized by mastery-oriented students. On the other hand, grades and peer comparisons are the fundamental inspirations of performance-oriented students. Effort, progress and self-improvement should be the main focus of the feedback provided by teachers instead of highlighting only grades or outcomes. Activities and assessments should be designed to point out the process of learning. Students will be motivated by the strategies to engage with tasks for the purpose of personal growth. For example, opportunities for self-reflection could be included in the assignments. It will ultimately enable students to pursue critical thinking about their progress and areas of improvement. Promoting a mastery-oriented environment can be adopted by educators to decrease the anxiety linked with grades. This strategy will also assist students in accepting challenges as opportunities to learn. As a result, more immersive engagement with the content will be achieved.

Strengthening ZPD-Based Support Systems

Another vital recommendation involves utilization of Zone of Proximal Development (ZPD). ZPD is defined as the range of tasks that can be performed by a student with the help of support though not independently. Strengthening this approach requires teachers to primarily assess students' current abilities through formative assessments and observations as an obligation. Identification of tasks that are just beyond their current capabilities but achievable with guidance is the next compulsory initiative. Providing step-by-step support and gradually removing assistance as students gain competence can be the strategies for teachers to scaffold instruction. Independence is created by this approach among students while still receiving the necessary support during difficult tasks. It is highly necessary to introduce collaboration with home tutors and parents since this scaffolding can be applied at home through their assistance. Consistency in support across

environments is thus confirmed. This coordinated effort will provide opportunities for students' progress within their ZPD. As a result, they are allowed to reach higher levels of understanding and capability over time.

Developing Collaborative Support Systems

Guaranteeing comprehensive support for struggling students requires development of collaborative support systems including teachers, parents and home tutors. Individualized learning profiles should be the focus of establishing these support systems. A combination of VARK learning style preferences, goal orientation data and ZPD assessments will be included in them. Instructions on the student's profile should be provided to each member of the support team. Specific roles to implement the learning plan should also be designated to them. Differentiated instruction can be applied by the teachers in the classroom. Conversely, additional personalized support can be offered by home tutors. Important understandings of students' engagement with their learning at home can be provided by parents. They can also assist in applying academic strategies outside of school hours. Collective efforts of teachers, tutors and parents can confirm that consistent and targeted support customized according to students' unique needs is received by them. An all-inclusive and collaborative learning environment is thus established.

Utilizing Formative Assessments and Ongoing Monitoring

An impactful recommendation for practice involves the use of formative assessments and ongoing monitoring which helps to track students' progress and customize instruction. Valuable understandings are provided by regular formative assessments, such as quizzes, student reflections and classroom observations. They help in ensuring proper acknowledgement of a student's learning style, motivation and ZPD. Students' responses to different teaching strategies should be monitored by the teachers and their methods should be adjusted accordingly based on real-time information. To exemplify, a student struggling with a task despite scaffolding may require the teacher to simplify the task further or make arrangements for additional support. Feedback loops should also be utilized by teachers which will guide their instructional decisions. In doing so, students can also be assisted to evaluate their own learning. Timely, targeted and effective interventions are confirmed by this continuous monitoring. It leads to supporting the academic growth of every student.

Professional Development for Educators

Finally, successful application of these practices for educators largely requires investing in professional development. Training should be provided to teachers, home tutors and support staff so that they can identify and evaluate learning styles, goal orientations and ZPD. Skills of educators in differentiating instruction can be improved by workshops. Expertise in offering effective feedback and establishing individualized learning plans can also be developed. Moreover, motivation should

be provided for teachers to participate in analytical practices where the effectiveness of their methods are evaluated by them. Initiating necessary adjustments which are more consistent with the needs of their students are also thus expected to be accomplished by them. Empowering educators with the knowledge and tools for application of personalized teaching strategies allow schools to confirm that the support required to succeed is achieved by all students, particularly those prone to falling behind.

CONCLUSION

To conclude, the need for personalized and coordinated instructional practices are focused on by this study. Students' learning preferences, goal orientations and developmental needs are duly acknowledged by those approaches. Acceptance of the VARK-based differentiation besides promoting mastery goal orientations and utilization of ZPD-based scaffolding empowers educators to build an all-inclusive environment. Every student including the ones vulnerable to academic failure are allowed to flourish in it. The incorporation of collaborative support systems and continuing formative assessments will confirm that the continuous support required by students to succeed academically is received by them. The application of these recommendations demonstrate the prospect to improve academic results besides contributing to more immersive student engagement. A more inclusive and effective educational experience for all learners will thus be confirmed.

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Student Learning Support Screening Tool

Purpose: Identify the learning style, motivational orientation, and ZPD to support students perceived as "lagging behind."

Student Information

- **Name**: _____
- **Class/Grade**: _____
- **Date**: _____
- **Teacher's Name**: _____

✅ Step 1: VARK Learning Style Screening Checklist

Check all that apply based on classroom observations:

Learning Style	Behavioral Indicators	✓
Visual (V)	Prefers diagrams, charts, color-coded notes	☐
	Remembers visual details easily	☐
	Watches gestures/facial expressions closely	☐
Auditory (A)	Learns best through listening or discussion	☐
	Talks through tasks or repeats instructions aloud	☐
	Recalls spoken information better than written	☐
Reading/Writing (R)	Frequently reads handouts and writes detailed notes	☐
	Enjoys writing summaries, essays, or written exercises	☐
	Often requests written instructions	☐
Kinesthetic (K)	Learns by doing, enjoys hands-on activities	☐
	Fidgets during lectures, prefers movement	☐
	Uses gestures to express ideas	☐

Primary Learning Style: _____

Secondary Style (if any): _____

Step 2: Learning Goal Orientation Checklist

Check the most common patterns:

Goal Type	Behavioral Indicators	✓
Mastery-Oriented	Interested in understanding deeply	☐
	Asks questions to improve knowledge	☐
	Shows persistence despite difficulty	☐
	Views mistakes as part of learning	☐
Performance-Oriented	Focuses mainly on grades/marks	☐

Goal Type	Behavioral Indicators	✓
	Avoids difficult tasks to not appear weak	☐
	Compares self to peers constantly	☐
	Gives up easily after setbacks	☐

Dominant Orientation: ☐ Mastery ☐ Performance

Step 3: Subject Specific ZPD Screening Checklist

Teacher reflection and observation form:

Reflection Points	Yes	No
I have assessed what the student can do independently	☐	☐
I've identified tasks the student can complete with help	☐	☐
The student improves noticeably with guided support	☐	☐
The student benefits from peer collaboration	☐	☐
I have adjusted tasks to fit their current learning zone	☐	☐
I've observed when the student no longer needs scaffolding	☐	☐
I've documented their preferred learning strategies	☐	☐
The student has been supported by a team (peers/parents/tutors)	☐	☐

Learning Support Profile Summary

- **VARK Type**: _____
- **Goal Orientation**: _____
- **ZPD Key Tasks (needs support in):**

  _____

  _____

- **Scaffolded Support Plan (who supports what):**
  - Teacher: _____
  - Home Tutor: _____
  - Parent/Guardian: _____

Teacher's Notes & Recommendations