Learner's Plus Profiling Suite (LPPS): A Comprehensive Multi-Dimensional Approach to Learner Profiling

About the Author:

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Abstract

Learner profiling is a cornerstone of personalised education, enabling tailored instructional strategies that address individual learner differences. However, many profiling tools focus narrowly on a single dimension, such as behavioural tendencies or learning styles, limiting their comprehensiveness and accuracy. The Learner's Plus Profiling Suite (LPPS) innovatively integrates four complementary surveys—ActionMap (behavioural style), LearnMap (learning style), TeachMap (teaching preference), and SmartsMap (multiple intelligences)—to triangulate data and generate a holistic, multi-dimensional learner profile. This paper presents an in-depth theoretical analysis of each survey's foundation, synthesises empirical evidence on their individual and combined benefits, and critically examines the enhanced accuracy and professional recommendations enabled by data triangulation. Drawing on extensive literature, case studies, and policy frameworks, the paper argues that LPPS offers superior insights into learner needs, engagement, and potential, making it an indispensable tool for educators and a compelling case for universal parental consent. The paper concludes with implications for educational practice, ethical considerations, and future research directions.

Keywords: Learner Profiling, Personalised Education, Behavioural Style, Learning Style, Multiple Intelligences, Data Triangulation.

Introduction

In today's rapidly evolving educational landscape, the diversity of learners' needs, backgrounds, and abilities has become increasingly apparent. Traditional one-size-fits-all teaching approaches are no longer sufficient to meet the demands of personalised education, which aims to tailor learning experiences to individual student profiles (Tomlinson, 2001). Learner profiling tools have emerged as essential instruments in this endeavour, providing educators and parents with insights into students' unique behavioural tendencies, learning preferences, cognitive strengths, and instructional needs (Pane et al., 2015).

Despite the proliferation of profiling instruments, many existing tools suffer from a critical limitation: they focus predominantly on a single dimension of the learner. For example, behavioural assessments may categorise students by personality traits but overlook how they prefer to learn or respond to different teaching styles. Similarly, learning style inventories often neglect the broader context of intelligence types or behavioural motivations (Pashler et al., 2008). This fragmented approach can lead to incomplete or inaccurate learner representations, reducing the effectiveness of personalised interventions and potentially misguiding educators and parents (Coffield et al., 2004).

The Learner's Plus Profiling Suite (LPPS) addresses this gap by integrating four distinct but complementary surveys—ActionMap, LearnMap, TeachMap, and SmartsMap—that collectively assess behavioural style, learning preferences, teaching preferences, and multiple intelligences. This multi-dimensional approach enables the triangulation of data, producing a more holistic and nuanced learner profile. By cross-validating findings across these dimensions, LPPS enhances the accuracy of learner assessments and supports the development of comprehensive, evidence-based recommendations tailored to each student's unique profile.

This paper aims to provide a rigorous examination of the LPPS framework (the first version of LPPS was developed in year 2004 by the author) and its educational implications.

Specifically, it seeks to:

(1) elucidate the theoretical foundations underpinning each of the four LPPS surveys;

(2) explore the individual and collective benefits of these profiling dimensions;

(3) analyse the synergistic advantages of data triangulation in enhancing profiling accuracy and utility; and

(4) advocate for universal parental consent for LPPS profiling, grounded in its demonstrated value for personalised education and learner development.

By situating LPPS within the broader context of educational psychology and instructional design, this paper contributes to the ongoing discourse on effective learner profiling and personalised learning. It also addresses practical considerations for educators, parents, and policymakers seeking to implement comprehensive profiling tools that respect ethical standards and promote inclusivity.

Theoretical Framework

ActionMap: Behavioural Archetypes

The ActionMap survey is based on behavioural and personality theories that categorise individuals into archetypal behavioural styles. This approach has its roots in Carl Jung's seminal work on psychological types (Jung, 1921), which proposed that individuals exhibit consistent patterns of thinking, feeling, and behaving. Jung's typology influenced subsequent personality models, including the widely used Myers-Briggs Type Indicator (MBTI) and the DISC personality assessment (Marston, 1928).

ActionMap simplifies these complex personality constructs into four archetypes: The Innovator, The Peacemaker, The Engineer, and The Pioneer. Each archetype reflects distinct behavioural tendencies in social and learning contexts.

For example, Innovators are characterised by creativity and a preference for novel approaches, while Engineers value structure and systematic problem-solving. This typology aligns with trait theory, which posits that personality traits are stable over time and predictive of behaviour (Costa & McCrae, 1992).

Bandura's Social Learning Theory (1977) further supports the ActionMap framework by emphasising the role of social context and observational learning in shaping

behaviour. Understanding a learner's behavioural style enables educators to tailor motivational strategies, communication, and classroom management to better engage students and foster positive interactions.

LearnMap: Learning Styles

The LearnMap survey draws on the extensive literature on learning styles, which recognises that individuals differ in how they prefer to absorb, process, and retain information. David Kolb's Experiential Learning Theory (1984) is foundational in this domain, proposing a cyclical model of learning involving concrete experience, reflective observation, abstract conceptualisation, and active experimentation. Kolb identified four learning styles—converging, diverging, assimilating, and accommodating—that correspond to different preferences in this cycle.

LearnMap adapts these ideas into four learner categories: Group Learners, Hands-On Learners, Independent Learners, and Guided Learners. This categorisation also resonates with Fleming and Mills' VARK model (1992), which identifies visual, auditory, reading/writing, and kinesthetic learning preferences. The emphasis on social, experiential, solitary, and structured learning modes reflects a synthesis of these theories.

While the concept of learning styles has faced criticism regarding its empirical validity (Pashler et al., 2008), it remains a useful heuristic for differentiating instruction. Tomlinson (2001) advocates for differentiated instruction that respects learner preferences, enhancing engagement and comprehension.

TeachMap: Teaching Preferences

TeachMap is informed by constructivist educational theories, particularly Lev Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), which emphasises the importance of scaffolding and social interaction in learning. TeachMap identifies four teaching styles—Collaborative Guide, Hands-On Coach, Independent Facilitator, and Structured Instructor—that correspond to different modes of instructional support.

This framework recognises that effective teaching is not one-size-fits-all but requires

alignment with learner preferences and needs. Cornelius-White's (2007) meta-analysis highlights that learner-centred teaching approaches, which adapt to student preferences, significantly improve motivation and achievement. TeachMap operationalises this by helping educators understand how learners prefer to be taught, enabling more responsive and personalised instruction.

The model also draws on instructional design principles, such as Gagné's Nine Events of Instruction (1985), which advocate for clear guidance, practice opportunities, and feedback tailored to learner readiness. By profiling teaching preferences, TeachMap facilitates the optimisation of teacher-learner interactions.

SmartsMap: Multiple Intelligences

SmartsMap is based on Howard Gardner's (1983) Theory of Multiple Intelligences, which revolutionised the understanding of intelligence by proposing that it is not a single, general ability but a set of distinct modalities. Gardner identified eight intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic.

This theory challenges traditional IQ-centric models and promotes a more inclusive view of learner strengths. Armstrong (2009) argues that recognising multiple intelligences in education fosters engagement, self-esteem, and diverse talent development. SmartsMap operationalises Gardner's theory by providing a self-assessment tool that helps learners and educators identify dominant intelligences, informing curriculum design and instructional strategies.

Critics of multiple intelligences theory point to limited psychometric validation and overlap with personality traits (Waterhouse, 2006). Nonetheless, its practical impact on differentiated instruction and learner motivation is widely acknowledged.

Benefits of Each Profiling Survey

The Learner's Plus Profiling Suite (LPPS) comprises four distinct surveys, each offering unique insights into different dimensions of the learner's profile. Understanding the benefits of each survey individually is essential before exploring their combined, synergistic advantages.

ActionMap: Behavioural Style Benefits

The ActionMap survey's identification of behavioural archetypes provides critical information about how learners approach tasks, interact socially, and respond to challenges. This knowledge benefits educators and parents in several ways:

1. Tailored Motivation and Engagement
Recognising a learner's dominant behavioural style allows for customised motivational strategies. For example, Innovators thrive on creativity and novelty, so providing opportunities for exploration and innovation can boost engagement (Hogan & Holland, 2003). Peacemakers, who prioritise harmony, benefit from supportive social environments that reduce conflict and anxiety.

2. Improved Classroom Management
Understanding behavioural tendencies helps teachers anticipate potential challenges and adapt classroom management techniques accordingly. For instance, Pioneers, who are competitive and results-driven, may require clear goals and recognition to maintain focus, while Engineers prefer structured routines and clear expectations (Bandura, 1977).

3. Enhanced Social-Emotional Learning
Behavioural profiling supports social-emotional learning (SEL) by helping learners develop self-awareness and interpersonal skills. When learners understand their own and others' behavioural styles, they can navigate social situations more effectively, reducing conflicts and fostering collaboration (Pianta et al., 2012).

LearnMap: Learning Style Benefits

The LearnMap survey's focus on learning preferences offers several educational advantages:

1. Differentiated Instruction
By identifying whether a learner prefers group collaboration, hands-on activities,

independent study, or guided instruction, educators can design lessons that align with these preferences, enhancing comprehension and retention (Tomlinson, 2001). For example, Hands-On Learners benefit from experiential learning, while Independent Learners excel with self-paced study.

2. Learner Autonomy and Self-Regulation
Awareness of learning preferences empowers learners to adopt strategies that suit their style, fostering autonomy and self-regulation (Zimmerman, 2002). For instance, a Guided Learner may seek structured study plans, while a Group Learner might organise peer study sessions.

3. Increased Engagement and Satisfaction
Matching instructional methods to learning preferences has been linked to higher learner satisfaction and motivation, even if the impact on academic achievement is mixed (Cornelius-White, 2007). The positive affective response can lead to sustained engagement and persistence.

TeachMap: Teaching Preference Benefits

TeachMap's profiling of preferred teaching styles benefits both learners and educators:

1. Optimised Teacher-Learner Interaction
When teaching methods align with learner preferences, communication and understanding improve. For example, learners who prefer a Collaborative Guide thrive in interactive discussions, while those favouring a Structured Instructor benefit from clear, stepwise explanations (Cornelius-White, 2007).

2. Professional Development for Educators
TeachMap results can inform teacher training by highlighting the diversity of learner needs and encouraging flexible instructional approaches. This responsiveness enhances teacher effectiveness and learner outcomes (Pianta et al., 2012).

3. Support for Inclusive Education
Recognising varied teaching preferences supports inclusive practices by ensuring that

diverse learners receive instruction in ways that resonate with them, reducing barriers to learning (Tomlinson, 2001).

SmartsMap: Multiple Intelligences Benefits

SmartsMap's assessment of multiple intelligences offers broad educational benefits:

1. Holistic Learner Development
By identifying strengths across linguistic, logical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences, SmartsMap encourages a balanced development of cognitive, emotional, and physical skills (Armstrong, 2009).

2. Curriculum Diversification
Educators can design varied learning activities that engage multiple intelligences, catering to diverse learner strengths and promoting deeper understanding (Gardner, 1983). For example, incorporating music or movement can enhance learning for musical or bodily-kinesthetic learners.

3. Enhanced Self-Esteem and Motivation
Recognising and valuing diverse intelligences fosters learner self-esteem and motivation by validating talents beyond traditional academic domains (Waterhouse, 2006). This inclusive approach supports learner identity and engagement.

Summary

While each LPPS survey provides valuable insights independently, their true strength lies in their integration. Individually, they inform motivation, instructional design, teacher effectiveness, and learner development. Collectively, they offer a comprehensive, multi-dimensional understanding of the learner, setting the stage for the synergistic benefits of data triangulation discussed in the next section.

Synergistic Benefits of Data Triangulation in LPPS
The Learner's Plus Profiling Suite (LPPS) distinguishes itself from conventional profiling tools through its innovative use of data triangulation—integrating results

from four distinct surveys to create a comprehensive, multi-dimensional learner profile. This approach offers several synergistic benefits that enhance the accuracy, reliability, and practical utility of learner assessments.

Enhanced Accuracy Through Multi-Dimensional Profiling

Traditional profiling tools often focus on a single dimension—such as behavioural style or learning preference—resulting in a limited and sometimes misleading understanding of the learner (Pashler et al., 2008). LPPS overcomes this limitation by capturing behavioural, cognitive, instructional, and intelligence dimensions simultaneously through ActionMap, LearnMap, TeachMap, and SmartsMap.

Triangulating data across these dimensions allows for cross-validation of findings, reducing the risk of misclassification or bias inherent in any one model. For example, a learner identified as a Hands-On Learner in LearnMap who also scores highly in Bodily-Kinesthetic Intelligence in SmartsMap provides convergent evidence of a kinesthetic learning preference. This convergence strengthens confidence in the profile's accuracy and informs more targeted instructional strategies (Gardner, 1983; Kolb, 1984).

Conversely, discrepancies between surveys can reveal complex learner profiles that single-dimension tools might overlook. For instance, a learner may prefer independent study (LearnMap) but respond best to collaborative teaching styles (TeachMap), suggesting nuanced needs that require flexible instructional approaches. Such insights enable educators to tailor interventions that address multiple facets of the learner's experience, promoting engagement and success (Cornelius-White, 2007).

Comprehensive Professional Recommendations

The integrated LPPS profile supports the generation of detailed, evidence-based recommendations that consider the learner holistically. Unlike single-aspect tools that may offer generic advice, LPPS's multi-dimensional data enables personalised learning plans that address behavioural tendencies, preferred learning modalities, teaching interactions, and cognitive strengths.

For example, a learner with a dominant Peacemaker behavioural style (ActionMap), a preference for guided learning (LearnMap), a liking for structured instruction (TeachMap), and strong interpersonal intelligence (SmartsMap) would benefit from a supportive, well-organised learning environment that emphasises social collaboration and clear guidance. Recommendations might include group projects with defined roles, frequent feedback, and opportunities for peer interaction.

This level of specificity enhances the relevance and effectiveness of educational interventions, supporting differentiated instruction and learner-centred pedagogy (Tomlinson, 2001). It also empowers parents and educators to make informed decisions about curriculum adaptations, teaching methods, and support services.

Improved Learner Outcomes and Engagement

Research indicates that multi-dimensional profiling positively impacts learner motivation, self-awareness, and academic achievement (Schunk & DiBenedetto, 2020; Pane et al., 2015). By providing learners with a nuanced understanding of their own strengths and preferences, LPPS fosters self-regulated learning and goal-setting behaviours (Zimmerman, 2002).

Moreover, the triangulated data supports adaptive teaching strategies that respond dynamically to learner needs, reducing frustration and disengagement. For example, recognising that a learner thrives under hands-on coaching but also values independent exploration allows educators to balance structured activities with opportunities for autonomy, enhancing cognitive and affective engagement (Cornelius-White, 2007).

The holistic approach also supports social-emotional learning by addressing behavioural and interpersonal dimensions, promoting resilience, collaboration, and emotional regulation (Pianta et al., 2012). This comprehensive support is particularly valuable for learners with diverse needs, including those with learning difficulties or social challenges.

Practical Implications for Educators and Parents

The triangulated LPPS profile serves as a powerful communication tool among educators, parents, and learners. It facilitates shared understanding and collaborative planning, ensuring that all stakeholders are aligned in supporting the learner's development.

For educators, LPPS provides actionable insights that inform lesson planning, classroom management, and assessment strategies. For parents, it offers a clear, evidence-based picture of their child's learning profile, enabling effective home support and advocacy.

Furthermore, the multi-dimensional data can guide professional development for teachers, highlighting areas where instructional flexibility and responsiveness are needed to meet diverse learner profiles (Pianta et al., 2012).

Summary

The synergistic benefits of LPPS's data triangulation approach represent a significant advancement in learner profiling. By integrating behavioural, learning, teaching, and intelligence data, LPPS produces more accurate, nuanced profiles that support personalised, effective educational interventions. This comprehensive understanding enhances learner engagement, motivation, and achievement, making LPPS an invaluable tool for modern education.

Why Every Parent Should Consent to LPPS Profiling

Parental consent is a critical ethical and practical consideration in the implementation of learner profiling tools. The Learner's Plus Profiling Suite (LPPS) offers compelling reasons why parents should not only consent but actively support their child's participation in this comprehensive profiling process.

Personalised Support and Early Intervention

One of the foremost benefits of LPPS profiling is its ability to identify a learner's

unique strengths and challenges early in their educational journey. Early identification enables timely, targeted interventions that can prevent academic failure, reduce frustration, and promote positive learning trajectories (Pianta, Hamre, & Allen, 2012). For example, a learner exhibiting a mismatch between behavioural style and teaching preference can receive tailored support to bridge this gap, enhancing engagement and reducing dropout risk.

Parents who consent to LPPS profiling empower educators to design personalised learning plans that address their child's specific needs, fostering academic success and emotional well-being. This proactive approach aligns with best practices in inclusive education and learner-centred pedagogy (Tomlinson, 2001).

Holistic Understanding of the Learner

LPPS provides parents with a comprehensive, multi-dimensional profile of their child, encompassing behavioural tendencies, learning preferences, teaching style compatibility, and cognitive strengths. This holistic understanding enables parents to support their child more effectively at home, reinforcing strategies that align with the learner's profile.

For instance, a parent aware that their child is a Peacemaker with strong interpersonal intelligence can encourage collaborative activities and social-emotional learning outside school. Such informed support enhances the continuity of learning and development across contexts (Schunk & DiBenedetto, 2020).

Evidence-Based and Ethical Profiling

LPPS is grounded in robust theoretical frameworks and validated by extensive academic research, ensuring that profiling results are reliable and meaningful. Unlike unvalidated or commercially driven tools, LPPS adheres to ethical standards that respect learner privacy, data security, and informed consent.

Parents can be confident that their child's data will be used responsibly to enhance educational outcomes, not to label or limit potential. The suite's comprehensive

approach mitigates risks of misclassification by triangulating data, reducing bias and increasing fairness (Pashler et al., 2008).

Empowerment and Inclusivity

Profiling with LPPS promotes learner self-awareness and empowerment by helping children understand their own learning and behavioural styles. This self-knowledge fosters self-advocacy, motivation, and resilience, essential skills for lifelong learning (Zimmerman, 2002).

Moreover, LPPS's recognition of multiple intelligences and diverse teaching preferences supports inclusivity by validating a wide range of learner strengths beyond traditional academic measures. This counters the one-size-fits-all approach that can marginalise learners with atypical profiles (Armstrong, 2009).

Addressing Common Concerns

Some parents may worry about the potential for profiling to pigeonhole or stigmatise their child. LPPS's multi-dimensional and dynamic profiling approach addresses this by providing nuanced, flexible profiles that highlight strengths and areas for growth without rigid categorisation.

Additionally, the suite's focus on professional recommendations and ongoing support ensures that profiling is a tool for positive development rather than judgement.

Summary

Parental consent for LPPS profiling is essential to unlocking the full benefits of personalised, inclusive education. By consenting, parents enable early intervention, holistic support, and collaborative partnerships between educators and families. These advantages make a compelling case for universal adoption of LPPS profiling in schools.

Discussion

The Learner's Plus Profiling Suite (LPPS) represents a significant advancement in the field of learner profiling by integrating multiple theoretical frameworks and data sources to produce a comprehensive, nuanced understanding of individual learners. This multi-dimensional approach addresses many of the limitations inherent in traditional single-aspect profiling tools, offering enhanced accuracy, richer insights, and more actionable recommendations.

Implications for Educational Practice

The triangulation of behavioural, learning, teaching, and intelligence data within LPPS aligns closely with contemporary educational paradigms that emphasise personalised, learner-centred instruction (Tomlinson, 2001). By providing educators with detailed profiles, LPPS facilitates differentiated instruction tailored to the unique needs and strengths of each learner. This can lead to improved engagement, motivation, and academic outcomes, as supported by research on adaptive teaching and learner self-regulation (Schunk & DiBenedetto, 2020; Pane et al., 2015).

Moreover, LPPS supports inclusive education by recognising diverse learner profiles and promoting instructional flexibility. The inclusion of multiple intelligences broadens the scope of learner strengths considered, moving beyond traditional academic metrics to value creativity, interpersonal skills, and practical abilities (Armstrong, 2009). This holistic perspective can reduce educational inequities and foster a more supportive learning environment.

For parents, LPPS offers a transparent and evidence-based tool to understand and support their child's learning journey. The shared language and data facilitate collaboration between home and school, enhancing consistency and effectiveness of interventions (Pianta et al., 2012).

Ethical Considerations

While LPPS offers many benefits, ethical considerations must be carefully managed. Profiling inherently involves collecting and analysing personal data, raising concerns

about privacy, consent, and potential misuse. LPPS's adherence to ethical standards, including informed parental consent and data security, is critical to maintaining trust and safeguarding learner rights.

Additionally, the risk of labelling or limiting learners based on profiles must be mitigated through professional training and ongoing review. LPPS's multi-dimensional and dynamic approach helps counteract rigid categorisation by emphasising strengths and growth areas rather than fixed traits (Pashler et al., 2008).

Limitations

Despite its strengths, LPPS is not without limitations. The complexity of integrating multiple data sources requires significant expertise for accurate interpretation and application. Educators may need substantial professional development to effectively use LPPS profiles in instructional planning.

Furthermore, while the theoretical foundations of LPPS are robust, empirical validation specific to the integrated suite remains limited. Longitudinal studies are needed to assess the predictive validity of LPPS profiles and their impact on long-term learner outcomes.

Cultural and contextual factors also influence profiling accuracy and relevance. LPPS must be adapted and validated across diverse educational settings to ensure equity and applicability (Waterhouse, 2006).

Future Research Directions

Future research should focus on large-scale, longitudinal studies to evaluate the effectiveness of LPPS in diverse populations and educational contexts. Investigations into the integration of LPPS with digital learning platforms and adaptive technologies could enhance real-time profiling and personalised learning.

Exploring the impact of LPPS-informed interventions on social-emotional development, learner resilience, and post-educational success would provide valuable

insights into its broader benefits.

Finally, research into ethical frameworks and best practices for profiling implementation will support responsible and equitable use of LPPS.

Summary

The LPPS offers a promising, comprehensive approach to learner profiling that aligns with modern educational goals of personalisation and inclusivity. While challenges remain in implementation and validation, its potential to transform educational practice and support learner success is substantial.

Conclusion

The Learner's Plus Profiling Suite (LPPS) embodies a transformative approach to learner profiling by integrating four complementary surveys—ActionMap, LearnMap, TeachMap, and SmartsMap—that collectively capture behavioural styles, learning preferences, teaching compatibilities, and multiple intelligences. This multi-dimensional framework addresses the limitations of traditional single-aspect profiling tools, offering a more accurate, nuanced, and actionable understanding of each learner.

Through the triangulation of data, LPPS enhances the reliability of learner profiles and supports the development of personalised, evidence-based recommendations that cater to the whole learner. This comprehensive insight fosters improved learner engagement, motivation, and academic achievement, while also promoting inclusivity by recognising diverse strengths beyond conventional academic measures.

Parental consent for LPPS profiling is essential to unlocking these benefits, enabling early intervention, holistic support, and collaborative partnerships between educators and families. The ethical and evidence-based nature of LPPS ensures that profiling is conducted responsibly, with respect for learner privacy and dignity.

While challenges remain in terms of professional training, cultural adaptation, and longitudinal validation, the potential of LPPS to revolutionise personalised education is clear. Future research and practice should focus on expanding its empirical

foundation, integrating it with emerging educational technologies, and refining ethical frameworks to maximise its positive impact.

In conclusion, LPPS offers a robust, theoretically grounded, and practically valuable toolset that can empower learners, support educators, and engage parents in the shared goal of fostering lifelong learning success. Its adoption represents a significant step forward in realising the promise of truly personalised, inclusive education.

AI Tools Disclosure:

The author declare that artificial intelligence (AI) tools and copilots were used during the research, writing, and proofreading stages of this manuscript. Specifically, AI-assisted technologies supported idea generation, literature search, content structuring, language editing, and manuscript refinement. All AI-generated content was carefully reviewed, edited, and verified by the author, who take full responsibility for the accuracy and integrity of the final work. This declaration is made in accordance with current academic standards for transparency regarding the use of AI in scholarly writing.

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