

Differentiated Instruction Ten Teachers' Implementation in Singapore

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KEY IMPLICATIONS

- There is a need to change teachers' mindsets on teaching, learning, and relationships with learners; existing focus on enhancing technical competencies of teachers is insufficient. Teachers need to see learners beyond their academic readiness.
- Structural changes need to be made for differentiated instruction (DI) to be compatible with the local education system. Teachers reported large class sizes (of 40) obstructing formative assessment and, consequently, differentiation in the classroom.
- Discussions on the potential and limitations of borrowing educational approaches from abroad need to take place before and during implementation of DI. Attention needs to be paid to how context shapes implementation and how we can localise DI.

BACKGROUND

Differentiated instruction (DI) has been leveraged to cope with increasing diversity in Singapore classrooms. DI – a learner-centred pedagogy aimed at maximising students' potential through responsive adaptations of content, process, and product – is an educational approach borrowed from the

U.S. (Tomlinson, 2014). Given the differing educational and sociocultural contexts between the U.S. and Singapore, very little is known about Singapore teachers' experiences of DI.

FOCUS OF STUDY

This study describes how 10 Singapore teachers implemented DI, the successes and obstacles they faced, as well as how their experiences changed over a year.

KEY FINDINGS

Along the five principles undergirding DI, teachers showed comparatively more success in creating environments that encourage and support learning, aligning to quality curriculum, and leading students and managing routines. However, they struggled more in terms of using assessment data to inform teaching and learning and responding to students' variance. In particular, teachers emphasised learner readiness at the expense of other learner traits (e.g., interest and learner profile). They interpreted their successes and obstacles along sociocultural, technological, and political reasons, revealing an interaction of DI with the wider educational and societal contexts within which it is situated. Participants revealed greater self-efficacy with implementation over time.

SIGNIFICANCE OF FINDINGS

Implications for practice and professional development

It is essential to let teachers experience differentiation themselves during professional development courses and to spend time helping teachers grapple with new educational ideas from different contexts. Teachers need to be re-cultured in their views of teaching, learning and learners, so that learners are invited into the curriculum and respected. For sustained, not episodic, differentiation to occur, there is a need to enhance teachers' competencies in curriculum design and shift planning focus to unit – not discrete lesson – planning. Additionally, teachers will stand to benefit from understanding how various educational policies overlap and are aligned to the larger goals of education.

Implications for policy and research

Given the shift from behaviourist to socioconstructivist theories of teaching and learning, smaller class sizes will need to be considered to facilitate an effective transition to a student-centric, values-driven education system. Other structural issues – e.g., heavy non-academic workload that interferes with

lesson planning, standardised within-school tasks, lack of differentiated educational resources – need to be addressed to alleviate teachers' burden on differentiation. Resources will also need to be devoted to studying the role of culture in the classroom and its relationship with society to inform re-culturing of teachers' mindsets.

PARTICIPANTS

Ten teachers (five primary, five secondary) from 10 schools participated in the study. Participants taught English, Mathematics, and Science across all the academic streams.

RESEARCH DESIGN

Participants took part in three semi-structured interviews, 39 lesson observations, 39 pre-/post-observation interviews, and one questionnaire.

REFERENCES

Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners*. ASCD: Virginia.

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