



Building Roads for Students' Success Reflection Sheet: Considering Differentiation and Diversity.

Key Points

Findings from the "Building Roads for Students' Success" project suggest that student level factors are predictive of achievement.

For example:

- Students with IEPs demonstrated lower achievement than students without IEPs.
- Absenteeism had a significant effect on student achievement and credit accumulation.
- Students from two parent families achieved higher results than those students from other family composition.
- Overall, New Canadians were "doing well" with respect to achievement.

Over the past several years, teachers have been encouraged to provide differentiated instruction for all students. The *Growing Success* document defines "Differentiated Instruction" as, "An approach to instruction designed to maximize growth by considering the needs of each student at his or her current stage of development and offering that student a learning experience that responds to his or her individual needs" (p. 146), while "Diversity" is defined as "The presence of a wide range of human qualities and attributes within a group, organization, or society. The dimensions of diversity include, but are not limited to, ancestry, culture, ethnicity, gender, gender identity, language, physical and intellectual ability, race, religion, sex, sexual orientation, and socio-economic status." (p. 146)

While we have all made assumptions about student characteristics or factors and their relation to student achievement, these assumptions may not have been supported by data in our schools. The "Building Roads for Students' Success" project examined student level factors that predicted academic success as measured by report card marks or EQAO assessments. Better understanding the predictive nature of student factors and on the achievement of different student populations can help us to ask better questions about how we meet the needs of these students through differentiated instruction.

Highlights of findings:

Students with IEPs:

- Despite efforts to meet the needs of all students, there are still gaps in achievement between students with IEPs and students without IEPs on both report cards and EQAO.
- For example, at the intermediate level, students with an IEP could be expected to have achievement marks 2.5 to 2.9% lower than their students without IEPs.
- Findings from the qualitative portion of the study suggest that teachers are concerned that students with IEPs are not receiving appropriate attention in order to meet their learning needs.

Students who are New Canadians:

- Interesting results were found with respect to students who were New Canadians. Though there were some mixed results, overall, these students are doing quite well.
- In secondary schools in Eastern Ontario, students who are New Canadians scored lower on the Applied math test compared to the Academic test, possibly representing two distinct populations of New Canadians.
- At the intermediate level, schools with higher proportions of New Canadian students had higher average marks in language arts, while schools with higher proportions of students whose first language was not English had higher math and science marks.

Highlights (continued)

Two Parent Families:

- Overall, students from two parent families demonstrate higher achievement than students from other family situations.
- How might this factor interact with other factors to impact on student achievement?

Attendance:

- Absenteeism had a small but statistically significant effect on students achievement.
- For example, for every 10 days a student was absent from school, their average mark would be predicted to be 0.37% lower than a student who was not absent at all during the year. At secondary, absenteeism was predictive of lower credit accumulation.
- These data provide statistical evidence to demonstrate an effect between absenteeism and achievement. As educators, what can we do to prevent absenteeism by students? Can we identify what students are at risk for absenteeism (e.g. Students with IEPs? Male students? Students in grade 9?)



Ontario Ministry of Education (2010). *Growing Success: Assessment, Evaluation, and Reporting in Schools*. Queen's Printer for Ontario.

Questions Raised

- Do teachers incorporate understanding about diverse populations and student level factors into their practises? How?
- What are the challenges to providing differentiated instruction for students? What are examples of success?
- What further investigation is required to better understand how to support differentiated instruction for diverse populations?

“The quantitative analysis were guided by the underlying principal that student achievement is a complex construct....there are several factors, both at the student and school level that contribute to students’ success and the ability of a school to help ensure students are able to meet high educational expectations.”



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