

Seek data, then decide and act

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ONE of the main areas that all schools who are embarking on School Development Planning are called to explore is that of student performance. Whilst, in my opinion, this is an area one should not explore in the initial stages of school-based development, there will come a time when this area will need to be explored and indeed taken seriously. My main concern here is that as people and facilitators embark on such improvement efforts, too often, that work is based on ill-defined problems and limited understanding of the factors related to or causing current results. Frequently, school improvement planning is based on the latest trends or hot topics rather than being grounded in data about student performance.

“Moving beyond the data into analysis and interpretation should happen before any interventions are considered”

One strategy for analyzing student performance data, the **Ishikawa (Fishbone) Diagram**, will help teams analyse data before they decide how to intervene.

Analysing data and developing possible interventions require time and structures to bring people together to review available data and interpret those data. Interpreting data requires school teams to draw conclusions about the possible causes or factors related to the results. Data only describe how students performed on certain assessments; they do not provide information about why the results occurred. Student performance data do not reveal why the lows and highs occurred, just that they did.

Yet, making inferences about potential causes is necessary before determining how to improve results. Moving beyond the data into analysis and interpretation should happen before any interventions are considered.

Let us briefly explore how the Ishikawa Diagram works. The Fishbone Diagram is named for its creator, Kaoru Ishikawa. Its purpose is to get input regarding the root cause of a specific problem.

The Method

- State the problem
- Record the team's perceptions under

categories such as equipment, people, environment, materials and procedures.

- Record and discuss the results.

Guidelines

As has already been stated the purpose is to generate ideas about the possible causes of the problem and to get everyone involved in thinking and contributing. Note that defensiveness and criticism of ideas are both detrimental to this process and should not be tolerated.

An Example

Let us explore one example. The problem identified is “Student scores in Mathematics are substantially lower than the national benchmark” (see Figure 1). On the head of the fish is the major problem identified from the data on student performance. On the big bones of the skeleton are the major factors that most likely are responsible for causing the problem. On the little bones are the factors that most likely contribute to the major factors.

Using this visual diagram is one way leaders/ staff developers can guide teams to analyze and interpret data before they generate ways to solve the identified problem.

Why not give this technique a try as you work towards creating quality classrooms.



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