The Process of Developing a School Improvement Plan: Situation Analysis, Data Collection, Analysis, Interpretation and Reporting Processes

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Abstract

A school improvement plan is a road map that sets out the changes a school needs to make to improve the overall level of school's achievement, and shows how and when these changes will be made. The purpose of this paper was to provide an overview of the process of developing a school improvement plan. The review was based on secondary data on various school improvement planning processes including school situation analysis, data collection, data analysis, data interpretation and reporting processes. The paper concludes that while the process of school improvement planning is a tedious one, it only marks the beginning of yet another tougher phase, namely the implementation stage which is meant to actualize the recommended school improvement interventions. Since the development of a school improvement plan is a process, this paper suggests the need for all school stakeholders to work together towards realizing a realistic school improvement plan and setting its implementation road map based on the identified school strategic issues, activities along with their time lines, actors and budget.

Keywords: Developing a school improvement plan, School improvement planning processes, School improvement planning, school situation analysis, school improvement reporting process, school improvement data collection process, School improvement data analysis process, School evaluation process

1. Introduction

A school improvement plan is a road map that sets out the changes a school needs to make to improve the level of student achievement, and shows how and when these changes will be made. School improvement plan helps the immediate stakeholders, mainly the principals, teachers, and school boards to answer one fundamental question, namely: What is the present focus of our school? School improvement plan has its cycles. It can adopt a three year, four or even five-year plan depending on thematic areas of school focus. In essence, school improvement plan informs school strategic plan. In developing school improvement plan, the members of school-community work through a variety of activities focus on various areas of priority such as school performance, curriculum delivery and parental involvement.

The main purpose of this paper was to provide an overview of the process of developing a school improvement plan. The paper includes situation analysis, which is conducted in order to identify the strategic school issues. This is followed by another key part, namely data collection process, which includes data type and data collection instruments. Other parts of the paper present literature on data analysis, data interpretation, data reporting process and conclusion.

2. Situation Analysis in School Improvement Plan

There is a need to conduct school situation analysis in school improvement planning. The situation analysis is meant to process a number of aspects in relation to school's state of affairs. The traditional approach used in conducting situation analysis is SWOT Analysis.

Situation Analysis is a structured planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or a programme. In school situation, SWOT analysis is conducted by a team and involves all the key school stakeholders, namely school board, parents, teaching and non-teaching staff and students. In order to identify the Strengths, Weaknesses, Opportunities, and Threats, the team is generally involved in the following activities: a) collecting data, b) analyzing c) interpreting and d) reporting.

SWOT analysis of the key stakeholders generally yields data that forms the basis for drawing an effective school improvement plan. The analysis unveils the key areas of concern, objectives, activities, implementation and evaluation, which are vital components in an effective school improvement planning.

3. Data Collection Process in School Improvement Planning

Data collection is the process through which raw information is retrieved from a given sample using various techniques and/or methods. In the school improvement plan, the process of data gathering is usually the first step. Its main purpose is to identify some of

the areas or needs that need to be addressed by the school management. It is through the data obtained in this process that the school management may be in a position to come up with conclusions and recommendations on the areas of improvement within the school. For effective data collection, one needs to consider the type of data being collected, instruments to be used and ethical issues.

3.1 Data Types
In collecting data for the school improvement plan, there is a need to understand the type of data and its function. There are two main types of data that can be collected for the function of school improvement plan. These include primary and secondary data.

Primary Data Type
Primary data involves the information that has been obtained directly from the field by the researcher. It involves the data collected by the researcher from the field using various data collection instruments such as questionnaires, interview guides, focus group discussions, and observation guide and document analysis. In school improvement planning, the team which is charged with the duty of conducting the analysis collects both primary and secondary data.

Secondary Data Type
Secondary datum is defined as "second-hand" information, which is either gathered by someone else like researchers and institutions or for some other purpose than the one currently being considered, or often a combination of the two (Cnossen, 1997). Secondary data types are used for the following reasons: a) to provide ease in terms of time, b) provides a cost-effective way of gaining a broad understanding of research questions, c) provides a ground for designing subsequent primary research (McCaston 2005) and d) useful to a person with limited research training or technical expertise (Beaulieu 1992).

3.2 Data Collection Instruments
Data collection process in school improvement planning involves a number of instruments. These include questionnaires, interview guides, focus group discussions, observation guide and document analysis.

Questionnaire
A questionnaire is a set of written questions on a sheet with spaces provided for respondents to reply to the questions. Questionnaires are frequently self-administered. A questionnaire is most useful when one needs to collect a small amount of clearly defined facts from a large number of people. According to Owens (2002), the main reasons why questionnaire method is used for data gathering include the following: a) it is potential in reaching out to a large number of respondents within a short time, b) it can give the

respondents adequate time to respond to the items, c) it offers a sense of security (confidentiality) to the respondent and d) it is an objective method since no bias resulting from the personal characteristics. In planning on how to improve the school, questionnaires are used to collect data from the key stakeholders (members of school community). This may be students, parents and teachers.

3.3.2 Interview

For school improvement plan, interview method is used to collect data from the key informants who are few in number. In this case, data from the school principals, Board of Governors and PTA representatives may be collected using interview method. These stakeholders are treated as key informants owing to their position in the school. Thus, they are able to provide concrete information, which can inform the school improvement plan.

Interviews can be conducted in a variety of ways; for example, by telephone or as a face-to-face interview using an interview schedule to guide your questions. However, a disadvantage of the interview method is that it can be time-consuming in terms of collecting and analyzing the information obtained.

There are a number of points one needs to have in mind when using face-to-face interviews when gathering data for school improvement: a) keeping time limit, b) gently probing the respondents for details and c) where appropriate, obtaining permission to tape-record the interview from the respondent.

3.3.3 Focus Group Discussion (FGD)

Focus Group Discussion is a tool that brings together the participants with similar backgrounds to take part in a guided discussion. For school improvement planning, BOG and the PTA members may be involved in the FGD. FGD gives an opportunity to the participants to agree or disagree with each other. The discussion provides an insight into how the participants think about an issue regarding the areas of school improvement, about the range of opinion and ideas, and the inconsistencies and variation that exist in the school surrounding (Stewart & Shamdasani, 1990).

When deciding to pick this tool for gathering data, there are some important points that one needs to have in mind: a) This method is frequently used in evaluation to discover what a group of people might think or feel about a question or problem, b) the goal of FGD is to provide an opportunity for participants to talk to one another about a specific topic and c) the facilitator in FGD is there to guide the discussion but should avoid intervening in the discussion. This tool is a powerful one in collecting data from homogeneous groups such as PTA and BOGs.

3.3.4 Observation Method

Observation method involves an individuals' direct participation in the data-gathering process. This method is used to obtain data on the things that may be seen or touched. It involves watching and recording the behavior of individuals or groups, or the events that occur in a particular place (Delamont, 2001). One of the advantages of using this approach is that one may choose when and where to carry out the observation procedure and what to observe. In gathering data for school improvement, observation method is a powerful tool. For instance, the observer may observe the observable components of school's teaching and learning environment in terms of the state of facilities, learners' behaviour, among others.

3.3.5 Document Analysis

Document analysis involves examination of documents to gain some insights regarding the question at hand. While making consideration of what document to use, one should take note of the document content, the facts in the document, how the document can be used, what the document answers and what it does not (Marshall & Rossman, 1998). For the purpose of school improvement planning, document analysis may be applied through the checking of the school records regarding the enrolment of learners per year, the number of learners who are able to complete their studies, class profiles, report cards, the available infrastructure bought by the school administration and those that still do exist or the records of the spoilt infrastructures that need maintenance or repair among many other documents.

3.5.6 Ethical Considerations in Data Collection

Ethical considerations are always taken into action when gathering data. In the data collection process on a school improvement plan, the rights of the school-community members involved in the planning should be ensured. This is done based on ensuring that the principles that govern stakeholders' participation are followed. The principle of voluntary participation which requires that people are not coerced into participating should be followed. Further, the informed consent of the participants is also ensured by explaining the aim of the data collection and the procedures involved (Driscoll & Brizee, 2012).

4. Data Analysis in School Improvement Planning

Data analysis is a process of inspecting, cleaning, transforming and modeling data with the goal of underlining essential information, suggesting conclusions, and supporting decision making (Adèr & Mellenbergh, 2008).

Data collected for school improvement may be analyzed using two approaches, namely quantitative and qualitative approaches. In quantitative approach, the information obtained is expressed in a numerical form. In qualitative approach, on the other hand, the

information obtained from participants is expressed in a narrative form. This approach emphasizes on the stated experiences of the participants and on the stated meanings they attach to themselves, to other people, and to their environment. Qualitative approach uses direct quotations from the participants with the aim of revealing a certain occurrence (Reason & Rowan, 2004).

The process of data analysis involves a number of steps, namely data planning, data cleaning, determining of a coding system, tabulation of data and presentation and interpretation of the findings.

Data planning: During data analysis, it is important to plan how to analyze the collected data (Patton, 1980); either using quantitative or qualitative approaches.

Data cleaning: The collected data pass through the process of cleaning to remove ambiguous elements. Content analysis is also applied to capture information from the open-ended questions and interview items (Schoenbach, 2004).

Determining a coding system: Data coding is a step where information is translated into values suitable for computer entry and statistical analysis. Variables are created from information with the aim to simplifying the analysis. Basically, variables are meant to summarize and reduce data, attempting to represent the "essential" information (Schoenbach, 2004). There are various applications, which help the process of data analysis. These include spreadsheets like Excel and statistical packages like SAS and SPSS (Coolican, 1994). For developing school improvement plan, data collected using questionnaire method is subjected to coding in order to synthesis during analysis. Data collected using interview and FGD methods may be processed using qualitative data analysis application like *Nvivo.*

Summarizing data using tabulation and figures: Upon data coding, statistical applications like SPSS are used to run output, which can be either in Tables or Figures. The collected data on certain thematic issues in a school set up are thus summarized and presented. This makes it easy to report the findings for effective school planning.

5. Data Interpretation
Data interpretation involves the provision of comments on the results obtained from the investigation. The interpretation is done in the light of the goals and objectives of the school improvement plan. This includes the key thematic areas or issues of school planning like parental involvement, curriculum design and implementation, school teaching and learning environment.

The interpretation of the data must be within the framework of what the data analyzed suggests and not an exaggeration. Statements that are not justified by the data do undermine the credibility of what is being presented. As such, interpretation should be done in context.

Another key point to note when interpreting data is to avoid alteration or skewing of the set objectives. Vested interest should not be shown in data interpretation in order to maintain the credibility of the results and the whole report. Therefore, it is important to ensure that interpretations are based strictly on what is evident in the data itself. This is one of the key components towards developing an effective school improvement plan.

6. Data Reporting Process

Reporting is a process through which the findings or results obtained from the data analysis is shared to the concerned stakeholders. This is done from a written perspective. Ideally, while reporting the findings, one begins with a brief outline of the main point that was conducted and its purpose. A systematic outline of the methodology used should be stated clearly. The report should also capture the main findings, and it should point out the next course of action.

There are key points to note while reporting: it is important for the information that has been compiled to be presented to all members of school community. Further, one needs to ensure that technical jargons are avoided. This is because, the reporting made from the analysis are used to make the critical decisions, which form the basis of school improvement planning.

7. Conclusion

This paper has briefly reviewed various processes involved in drawing a school improvement plan, including school situation analysis, data collection, data analysis, data interpretation and reporting processes. From the presentation, it is evident that the process of developing a school improvement plan is a tedious one. However, this phase only marks the beginning of yet another tougher one, namely the implementation phase which is meant to actualize the school improvement plan. The paper suggests the need for all school stakeholders to work together towards realizing a realistic school improvement plan and setting its implementation road map based on the identified school strategic issues, activities along with their time lines, actors and budget.

References

Adèr, H.J., & Mellenbergh, G.J. (2008). *Advising on research methods: a consultant's companion.* Huizen, the Netherlands: Johannes van Kessel Publishing.

Beaulieu, L.J. (1992). *Identifying needs using secondary data sources.* Institute of Food and Agricultural Services, University of Florida.

Cnossen, C. (1997). *Secondary research: learning paper 7.* School of Public Administration and Law, the Robert Gordon University.

Coolican, H. (1994). *Research methods and statistics in psychology* (2nd ed.). London: Hodder & Stoughton.

Delamont, S. (2001). *Fieldwork in educational settings: methods, pitfalls and perspectives.* London: Routledge.

Driscoll, D.L., & Brizee, A. (2012). *Ethical considerations in primary research*. Retrieved September 29, 2013 from http://owl.english.purdue.edu/owl/resource/559/02/

Marshall, C., & Rossman, G.B. (1998). *Designing qualitative research*. Thousand Oaks, CA: Sage.

McCaston, M.K. (2005). *Tips for collecting, reviewing, and analyzing secondary data.* Retrieved September 10, 2013 from http://pqdl.care.org/sii/compendium/Original%20documents%5CSecondary%20Data%20Analysis.doc.

Owens, L.K. (2002). *Introduction to survey research design.* SRL Fall 2002 Seminar Series. Retrieved September 15, 2013 From http://www.srl.uic.edu/seminars /Intro/introsrm.pdf

Patton, M.Q. (1980). *Qualitative evaluation methods.* London: Sage.

Reason, J.T., & Rowan, J. (2004). *Research methods: data analysis human enquiry: a sourcebook in new paradigm research.* Chichester: Wiley.

Schoenbach, V.J. (2004). *Data analysis and interpretation.* Retrieved September 10, 2013 from http://www.epidemiolog.net/evolving/DataAnalysis-and-interpretation.pdf

Stewart, D.W., & Shamdasani, P.N. (1990). *Focus groups: theory and practices*. London: Sage.

Suggested Citation

Wanjohi, A.M., & Ndimba, M.A. (2014). The Process of Developing a School Improvement Plan: Situation Analysis, Data Collection, Analysis, Interpretation and Reporting Processes. *Africa Research Journal of Education and Social Sciences*, 1(1). Available online at http://www.arjess.org/education-research/the-process-of-developing-a-school-improvement-plan-situation-analysis-data-collection-analysis-interpretation-and-reporting-processes.pdf