Case Study: Professional Development Plan- Lincoln Elementary School and Four Others

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Introduction

Teachers and administrators have to be dynamic in the persistently changing technological environment. Thus, they need to be abreast with the emerging technological tools, be capable of selecting the most effective tools, and be able to apply those tools responsibly to improve student performance standards (see for example; Lawless & Pellegrino, 2007). It is on this score that professional development is deemed a catalyst in regard to effective teaching and positive educational outcomes.

At Lincoln Elementary and other schools in the same vicinity, there is lack of concerted efforts to prioritize and sustain professional development program for teachers. The outcomes are recent challenges such as declining student achievement scores, declining enrollment, and possible closure of schools. As a technology coordinator, Lincoln's case presents an opportunity to suggest measures to help offset those challenges. Therefore, the following initiatives are proposed to ensure professional development for teachers, principals and possibly, other stakeholders. The vision is to equip them with the requisite skills to integrate technology to improve educational achievements in the district on a sustainable basis for a period of two years.

Proposed Activity 1

a. Survey

Given that the key difficulty for technology integration training is time constraint, it is important to prioritize flexibility of schedules so that teachers and principals can meet the demands without sacrificing their other academic and family responsibilities. In this regard a survey will be conducted vial emails to solicit stakeholder inputs. This proposal would be informed by the results of the survey.

Goals/Objectives

1. To obtain prior inputs from participants on schedules generally considered convenient.

   The survey questions;
   a. Which of the week days and times do you consider convenient for training?
   b. How many hours can you avail yourself for classes in a week given your other schedules

Proposed Activity 2.

b. Organization of stakeholder meeting

A stakeholder meeting will be organized for teachers, principals, and others.

Goals/objectives

1. To highlight or orient participants on the need for professional development programs and the entailing challenges and solutions.
2. Formation of groups for the ensuing training activities.

Proposed Activity 3

Implementation

The programs will be in the blended format where classrooms and the available resources such as computer laps, laptops, and whiteboards will be utilized. With recourse to flexibility, some tasks including discussions and information sharing will be done on an online platform, Example, wiki space, emails, etc. It is planned that a one and half hour training sessions are held two days in a week.

Principals:

School principals are considered administrators, and as such, their knowledge and roles are quite essential for the sustainable implementation of instructional technology programs. A separate session will be organized for the Principals once a week. Prior to organizing any training for the principals, a digital survey would be conducted. Primarily, the survey is to seek information regarding;

1. The extent to which principals are familiar with contemporary technological tools;
2. The extent to which they have applied technology in their day to day tasks;
3. The level of investment made by their schools regarding modern digital technological tools.

Goals/objectives

1. To determine the scope of the training for the principals.
2. To determine the course content for the principals
3. To determine the type of tools and applications that principals should be exposed to.

Training activities

Essentially, training for the principals would first be focused on leadership training. They will be introduced to critical elements of leadership as facilitators and enablers of digital culture and environment; providers of the needed resources and technological tools; monitors and evaluators of technology programs; and facilitators of stakeholder collaborations. The subsequent training sessions for the principals would emphasize their roles as promulgators of digital citizenship, and thus, seek to ensure equity, collaboration, and ethical uses of technology.

Goals/Objectives

After every training session (course) the principals would be evaluated to establish the extent of knowledge they have gained juxtaposing their previous knowledge. Thus, at the end of the implementation period the principals should be able to pinpoint, among other things, that;

1. They have been able to schedule flexible time periods for their teachers to avail themselves for trainings;
2. They have liaised with their school district, state, and other agencies for the provision of tech tools for instructors and students;
3. Their schools have adopted tech tools (at least 4 of them)
4. They have conducted student and peer evaluations on the extent to which teachers have incorporated technology in their lessons;
5. They have evaluated student test scores to establish whether there have been some improvement or otherwise since the implementation of professional development programs.

Teachers:

Teachers have the ultimate responsibility of implementing technology integration programs in the remaining four elementary schools in the district. To start with, a digital, and possibly, in person survey will be conducted on;

1. The level of teachers' exposure to new technological tools
2. The extent to which they have integrated technological tools in their teaching tasks

Goals/objectives

The survey results will determine;

1. The issues to be covered under the program (scope and structure);
2. The basic tools that teachers need to be familiar with for effective teaching outcomes

Training Activities

A one and half hours classes will be held two times a week for the teachers. Four groups will be formed and each group will have a trainer. External facilitators will occasionally be invited to train the teachers on some of the issues when necessary.

Basically, teachers will be taught how they could be creative in utilizing technology in both face-to-face and virtual classroom environment to enhance students learning outcomes. In this respect, they will be introduced to several tools that may be pedagogically effective or capable in conveying course content. They will be introduced to tools that may aid them in conducting assessments regrading students' learning outcomes. Beyond equipping teachers with skills in digital tools and the effective application of those tools, they will be oriented on the ethical uses of technology and how to guide students against the dangers of the digital technological environment.

Moreover, co-teaching strategies will be explored using the four trainers as mentors. A collaborative or discussion platform tools such as *Wikispaces, Google drive, Podio, Titanpad, etc.* will be created for teachers to interact with their peers and share information.

Goals/objectives

At the end of the program teachers should be able to;

1. Demonstrate skills in new technological tools-- at least 5 of them
2. Select the appropriate tools for content delivery—Justify their choices based on the TPACK (Technological Pedagogical and Content Knowledge) principles
3. Utilize technological tools to conduct assessment at least 2 times per school term
4. Create a digital interactive platform for their students (Wikispaces, google drive, etc)
5. Pinpoint 4 important measures they have in place to monitor students' activities online and application of other technological tools.
6. Collaborate with others in learning and teaching of new skills
7. Communicate with school administrators on challenges and new developments.

Sustainability of the program

Ensuring flexible schedules: Critical to the sustainability of the program is flexibility of schedules to meet the circumstances of both trainers and teacher-students as the program is underway. This means that periodic survey would be carried out to determine whether the existing schedules are conducive or not. This will help to make any necessary adjustments.

Provision of resources: Resources are very central to the success and sustainability of the program. Though the existing facilities including classrooms and computers are enough to kick start the program, new ones should be made available to sustain the program for the period of two years. This will require efforts to solicit support from local, state, and national governments.

Networking and collaboration: It is important to explore similar efforts at different jurisdictions and forge collaboration with others in terms of access to emerging tech tools, training materials, and possibly, training personnel. By this, professional growth and development and the subsequent outcomes on students' test scores would reflect other successful stories elsewhere.

Measurement of Relevance: Periodic assessments will be carried out, as already indicated, to ascertain the extent to which the school principals are doing their parts in availing themselves for the trainings and implementing what they have learned. Similar efforts will be done in the case of the teachers. Fundamentally, the pre- and post- assessment of the student test score will be carried out to ensure that the outcomes are a reflection of the intended objectives.

Summary of Overall Goals/objective

1. Equip teachers in all the four elementary schools with technological skills including those that create interactive platform for students and teachers. Every teacher should be able to show at least one digital platform created that aid student learning.
2. At the end of the two year period, every classroom in the schools should have computer projectors, and in addition, the schools should have a computer lad where students can access information and undertake exercises

3. The first year of the program should see an improved summative and standardized student tests scores going up indicating at least 50 percent improvement over the previous year in regards to the number of students who passed the core subjects. It is estimated that the figure will be 100 percent at the end of the two year period.
4. Enrollment rate in all the four remaining schools is expected to improve by at least 25 percent in the first 6 months, 50 percent at the end of the year, and at least 90 percent at the end of the two year period.

Appendix

Time Line

First Quarter 2017:

a. Collect data through surveys to determine appropriate schedules for the targeted audience
b. Organize stakeholder meeting to discuss schedules, inputs, their specific roles

c. Collect data through surveys to determine the extent on technology integration in teaching and learning in the schools and what need to be done
d. Implement preliminary lessons to orient participants on emerging instructional technologies

Second Quarter of 2017

a. Implementation of second phase of the program
b. Assessment of technology integration in the schools
c. Assessment of evidence of positive impact on test scores and enrollment

Third Quarter 2017

a. Implementation of third phase of the program
b. Assessment of technology integration in the schools
c. Assessment of evidence of positive impact on test scores and enrollment
d. Assessment of attendance or continuous participation of teachers and principals

Fourth Quarter 2017

a. Implementation of fourth phase of the training program
b. Assessment of technology integration in the schools
c. Conduct or implement peer-coaching
d. Assessment of evidence of positive impact on test scores and enrollment

First Quarter 2018

a. Conduct a stakeholder meeting to deliberate on the achievements to date and suggest measures for the sustainability of the program.
b. Implementation of the revised version of the training

Second Quarter 2018

a. Training continues
b. Assessment of the levels of technology integration
c. Assessment of teachers' and students access to facilities in classrooms
e. Assessment of evidence of positive impact on test scores and enrollment

Third Quarter 2018

a. Training continues
b. Conduct or implement peer-coaching
c. Assessment of evidence of positive impact on test scores and enrollment

Fourth Quarter 2018

a. Training continues
b. Conduct stakeholder meeting on how to build upon the accomplishments made

c. Assessment of student test scores and enrollment rate
d. Writing a comprehensive report on the program for future reference

Reference

Lawless, K. A., & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of educational research*, *77*(4), 575-614.