Focus on Professional Development in Higher Education Institutions

Colin Pinto
Undergraduate Programs, Stamford International University
colin.pinto@stamford.edu

Abstract

The paper presented explores and identifies a reflective process on professional development which basically refers to ongoing learning opportunities available to teachers and any other education personnel through online or traditional institutes and constituencies. This paper echoes on how professional development can be focused around student engagement through thinking skills and strategies; and the link between pedagogy and literature. The paper emphasizes the importance of professional development based on four stages: exploration of professional development for the present; developing the portfolio; undertaking the professional development and reporting on the professional development. The more educators integrate various strategies into daily learning, the more students will gain confidence to question, analyze, identify and apply ideas and concepts.

Today, educational institutes are facing an array of complex challenges as they have to work with an increasingly diverse population of students, integrate new technologies into classrooms, and meet extensive academic standards and objectives. This paper supports the theory that quality teaching and school leadership are the most important factors in raising students' achievements. For improved educational strategies, professional development is a very good tool to strengthen teacher performance. Many people are not aware of their institution's methods for improving teaching and student learning. This paper demonstrates that professional development is the appropriate way educators can better their performance and raise student achievement.

Keywords: Professional Development, educational reforms, professional portfolio, educational practice, learning challenges, student achievement

1. Introduction

In the words of Albert Einstein: ***"I felt that my thirst for knowledge was being strangled by my teachers; grades were their only measurement. How can a teacher understand youth with such a system? From the age of twelve I began to suspect authority and distrust teachers"*** To be a truly successful educator, professional teachers must be dedicated to lifelong learning to benefit both, their students, as well as themselves. Professional development is required throughout one's career in education, as it supports professionalism and provides equal opportunities for educators to gain and improve the knowledge and skills relevant to their job performance. Student achievement depends on rigorous standards and a knowledgeable team of educators. To maintain high standards for students, there must be high standards for staff members who work with them.

Personal attribute

To be an effective educator, I needed to embark on a professional development program that would enable me to further cultivate knowledge and skills that I needed to address students' learning challenges, and to provide correct and adequate support to overcome those challenges. I realized that professional development is only effective when it causes teachers to improve their methods of instruction and also causes administrators to become better school leaders. It all depends on how carefully we, as educators, conceive, plan and implement development as there is no substitute for rigorous thinking and execution.

Professional development may be explained as **"The essential task for a teacher is to facilitate learning. As teachers we often need to consider the "support role" as much as the "academic role", but our prime purpose is to enable the pupil to learn."** (Banks & Mayes, 2012).

In this paper, the four stages of professional development will be explored, and together with literature, will be able to understand that professional development keeps teachers up-to-date on new research, how students learn, new curriculum resources, emerging technological tools for the classroom, and much more. Effective professional development should be ongoing, experiential, collaborative, and connected to and derived from working with students and understanding their dynamics and culture.

1. Exploring Professional Development for New Times.
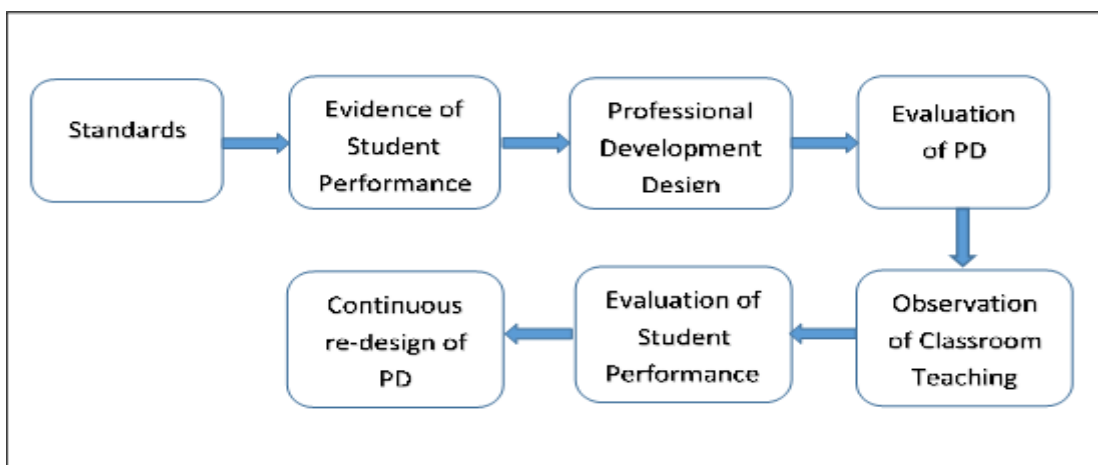## What Is Professional Development?

"Improved self-management increases an education leader's ability to cope with stress, resolve conflict, manage change and manage to change, achieve sustainable peak performance, build and lead effective teams and influence organizational cultures." (Tomlinson, 2004.)

Some observers would regard the emphasis on professional development as an inadequacy in education practitioners. But today, emphasis on professional development comes not from acknowledging inadequacies or deficiencies, but from growing recognition of education as a dynamic and professional field. Education practitioners are constantly discovering new knowledge and approached to different styles of pedagogies. Professional development can be considered as a process that is ***intentional, ongoing*** and ***systematic.*** It is a consciously designed effort to bring about positive change and improvement. It is a deliberate process which is guided by clear vision of purposes and planned goals by which content materials are selected, procedures developed and evaluations prepared.

It is believed that people, most surely, can be encouraged to change. But if the system in which the individual works does not support them, or allow enough flexibility, then the efforts for improvements will surely change. Similarly, if the organization's structure and policies are changed, but the individual within the system does not have enough opportunity to learn how to work with the new system, then the efforts of improvements will again fail.

Therefore, it is now safe to say, and maintain the fact that professional development is intentional, ongoing and systematic in relation to individual development and simultaneous development in the organization.

The Relationship Between Professional Development and Student Learning:
Exploring the Link Through Design Research

Figure 1: Design approach to Professional Development

Beth Kubitskey, Barry J. Fishman, & Ron Marx Center for Highly Interactive Computing in Education,
University of Michigan

Focus of Professional Development

Strategies that schools and school districts use to ensure educators continue to strengthen their practice throughout their career could actually be termed as Professional development. The most effective professional development engages teams of teachers to focus on the needs of their students. The teachers involve and problem solve together in order to ensure all students achieve success. When goals for professional development are established and set, it is imperative to look beyond what educators or trainers are expected to do. Our focus, instead, should be on what participants are expected to do and what we hope the results of their actions will be.

    "Professional Development for learning should be meaningful for the deliverer, the audience and those learners who are the end recipients of the learning (usually students but could also be teachers, leaders or parents". (Ende, 2016.)

Change in Professional Learning

If learners are to achieve at high levels demanded by the high standards that communities have adopted, teachers have to help them do so. Teachers today are most definitely at the center of reform as they must maintain and carry out the high standards required in the classroom for education. Success of ambitious education reforms initiative and, in a large part, qualification and effectiveness of teachers.

    "To carry out the demands of education reform, teachers must be immersed in the subjects they teach, and have the ability to both communicate basic knowledge and to develop advanced thinking and problem solving skills among their students" (Loucks-Horsley, Hewson, Love & Stiles, 1998)

Formerly, teachers used to learn teaching by using a model of teaching and learning that primarily focuses heavily on memorizing facts and information without the emphasis of deeper understanding of the subject matter and knowledge. But today teaching has shifted to a more balanced approach which places emphasis on understanding the subject matter, which initiates the teachers to learn more about the subjects they teach and how students need to learn from these subjects. The integral part of any profession, and teaching is no exception, is the continual deepening of knowledge and skills of what is being taught. Educational reform requires teachers not only to update their information and skills, but also to transform themselves their role as teachers. This sort of education establishes new expectation for students, teachers as well as the school communities. Professional Development, today, is a key tool that keeps teachers abreast of current issues in education and also helps them in implementing innovations and in refining their teaching practice.

In retrospect, education in schools is creating new challenges where a movement for greater teacher professionalism and an emphasis on the school is the locus for changes. Laureate International Universities, the largest higher education network in the world, has many institutions that are house under this umbrella. Laureate, through its faculty development portal, offers a wide range of professional development courses for faculty who want to enhance their educational abilities. "Innovation and Creativity in Higher Education", one of the many courses offered by Laureate for Professional Development. This course facilitated interaction and discussions with participants from all over the globe. Their views and perceptions allowed me to re-think strategies to tackle everyday challenges in education. It also paved way to redevelop traditional approaches to meet the complexity of present educational reforms. Continuous improvements in standards have created new expectations for students, as well as the search for better assessment techniques. Today, teacher roles are changing as teachers are learning to act more like coaches and facilitators rather than instructors. Effective professional development is necessary for all teachers involved in educational reform. Professional development also is essential for school-improvement teams to build a comprehensive framework for ongoing refinement

Importance of Professional Development

The importance of professional development cannot be overemphasized, especially in a field as vital as education. Only by continually arming oneself with the latest research, techniques and knowledge in the profession, can teachers hope to stay effective in their career.

"Improved districts hold all adults in the system accountable for students learning, beginning with the superintendent, senior staff and principals. The districts have clear expectations for instruction and apply consistent pressure on schools for improved outcomes for students" (Shannon & Bylsma, 2004)

There can only be few teachers who have been unaffected by the rapid pace of change which has influenced the teaching professions over the past decade. Professional teaching relies increasingly on an ability to respond quickly to changing student needs and requirements. Teachers are all being encouraged to embrace change and foster innovation. To adapt to these changes, there should be demands for new skills. No longer can keeping "up-to-date" be optional, as it is increasingly central to professional and organisational success.

The response of many teachers to this challenge has been to embrace the concept of continuing Professional Development. From developing a single specialist skill in students to multiple skills requires the teachers to adapt to Professional Development. From planning careers and developing a skill during initial training period to students planning their own careers and continuous life-long learning requires the teachers to adapt to Professional Development. Embedded professional development allows 'teacher leaders' to mentor and support new or struggling teachers. It also provides excellent opportunities for collaboration among school and district staff and promotes the growth of strong professional networks within the district.

2. Developing the Professional Development Portfolio.

It is important to be aware of the fact that Professional Development is a subset of adult learning. Ascertaining how professionals engage in this process is important and distinctive in several ways. Professionals need to first master, and then maintain, a specific body of knowledge that is distinctive to their profession. They need to then develop the ability to apply the information in effective and appropriate ways. Last but not the least, professionals need to be skilful and autonomous learners who select and complete only those learning activities they feel are relevant and important to their professional practice.

Research conducted on effective professional development is undeviating across many studies. Researchers Willis Hawley and Linda Valli (Westchester Institute for Human Services Research) in their fusion of professional development literature, find that high-quality teacher development:

- provides a strong foundation in subject content and teaching methods;
- integrates goals to improve education guided by a coherent long-term plan;
- is designed to identify teacher needs and uses collaborative problem solving by discussing dilemmas and challenges
- provides sufficient time and resources, and engages teachers in working with colleagues in their school;
- is evaluated based on teacher effectiveness and student learning

Many considerations have been made while designing staff development programs for professional educators. Literature does not normally provide evidence of a common or one best approach to professional development, but there are several types of programs that are coupled with professional development. Successful Professional Development programs should be based on the knowledge of the people, the role they play and settings in question, as well as on the overall understanding of the change process and meaning of change. In a nutshell, programs should be designed specifically for the professionals and their unique conditions of practice. Workshops, conferences, meetings, seminars, presentations, all make up the typical 'professional development agenda'.

However, it is significantly understood that long-lasting professional development goes beyond a schedule of activities and events. If we need to take professional development to the "next level", we need to establish a mind-set that focuses on on-going learning and encourages continuous self-reflection.

Link between Professional Development and Educational Practice

Having established a variety of formats and the focus for Professional Development, professional learners must think of best ways to engage themselves beyond just activities. If Professional Development is to be successful, certain principles as to how adults learn should be borne in mind. Strategies for engaging teachers should involve them in identifying areas of particular interest. This involvement is likely to increase their commitment to learning new techniques and paying attention to research. Teachers must also be encouraged to speak out loud and share their concerns and thoughts. They should be provided with hands-on experiences when possible.

For instance, if they are learning how to teach students to present their work, the professional development session should provide time for participants to practice the skills of presentation. Also, when watching clips or instructional videos about commendable practices, teachers should not only observe but also discuss what they are viewing. They should not be the unaffected recipients of yet another lecture but they should focus on taking responsibility for their own professional direction.

Joyce and Showers (1988) provides a model to describe the associated variables of Professional Development and their relationship.
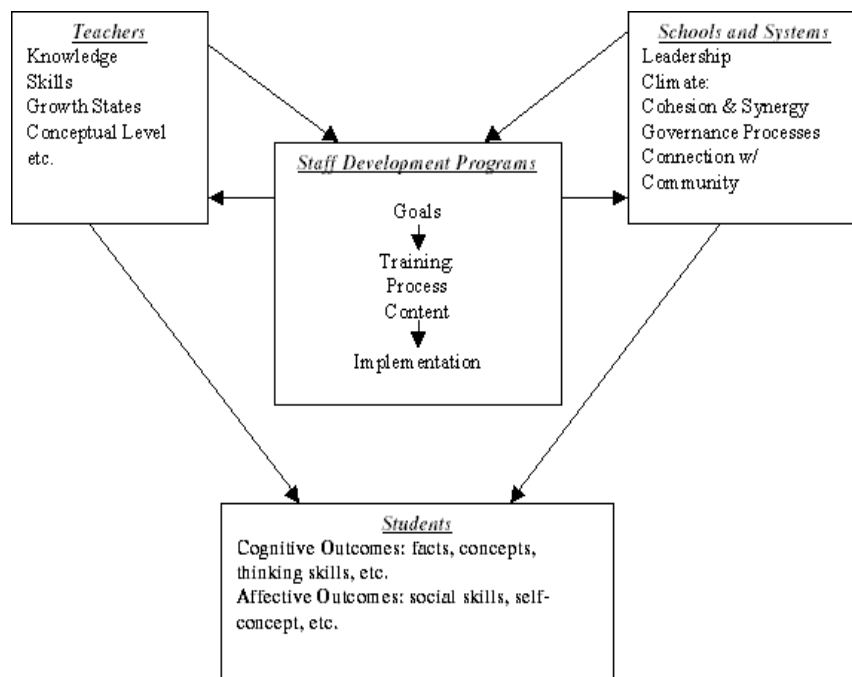
A professional's knowledge may be defined as a combination of both technical and practical knowledge. Technical knowledge is defined as the codified (the "know what") information, obtained largely through classroom lecture, while practical or interpretive (the "know how") knowledge is acquired only through experience. Thus, while both types of knowledge are necessary for effective professional practice, it is the experiential knowledge that changes the practice behaviour of the professional.

A learner may acquire information in a professional development seminar, but it will not cause him/her to alter practices unless the specific problem discussed is the one that the learner is presently facing. Practical knowledge is directed towards action. Learners need work in "action contexts," in which they must make decisions regarding practice "in the moment" and take responsibility for the consequences of their actions. It is believed that this is the context in which the largest part of learning takes place.

Since a long time now, the authors (Darling-Hammond and McLaughlin, 1995) argued that in today's fast developing world of reform, teachers need to adapt to present needs of learners and teach in a ways they never contemplated before. The authors suggest that effective professional development must:

- *engage teachers in practical tasks and provide opportunities to observe, assess and reflect on the new practices*
- *be participant driven and grounded in enquiry, reflection and experimentation*
- *be collaborative and involve the sharing of knowledge*
- *directly connect to the work of teachers and their students*
- *be sustained, on-going and intensive*
- *provide support through modelling, coaching and the collective solving of problems*
- *be connected to other aspects of school change"*

What the past years have communicated is that respect, from students, comes through time, experience and making hard decisions. There is more that goes into being a good teacher than simply having knowledge. It is not effective for teachers to be cynical or negative about their students, or else, cast themselves as victims. It is exciting to try things that may fail; if someone succeeds, then the person has accomplished something – and if someone doesn't succeed, then one has learnt that adjustments need to be made. Overall, just about all good teachers are eternally busy, and this is not because of the volume of classes they have to teach but because they are always trying something different or else refining what they have previously tried, not only to realize their professional direction, but also to direct students in taking responsibility in focusing on their own professional direction. This refinement can only come with professional development.

Evidently, good teachers need to motivate students by working within their incentive system, and to know their incentive system, one should first get to "know them". Getting to know students in order to teach them, needs coaching and this coaching is concentrated in teacher professional development. Professional Development provides learning opportunities, including educational programs, courses, workshops, activities, resources, and interactions with instructors, mentors, and colleagues. Therefore, for a teacher, who has a full time teaching job, professional development plays an important part in keeping up with times.

3. *Undertaking the Professional Development.*

Fortunately, professional development is now widely recognized as a national priority. Many schools now support large scale professional development activities, some of which are excellent. Professional development practices and experiences can lead teachers to change classroom activities which results in better teaching and improved outcomes for students.

"The challenge for the education system—for principals, superintendents, mathematics supervisors, political leaders, voters, and others—is to make high-quality professional development a given that does not depend on chance, circumstance, or heroic efforts by teachers." (Zucker 2009)

Today, employees are reinforcing themselves with development which is indicative that they need and want to be in a workplace that has meaning and value to themselves and that, in it, they find the means and relevant opportunity to also be a contribution to the community. These initiatives and dependency on development gives rise to experiences that are valuable for learners to learn more about work in a specific occupational area. There are constant advances in our understanding of how students learn, and teachers need to know what these are.

"We need to train and retrain our hands so our teaching fits in line with the critical thinking, problem solving and group dynamics necessary to give our children a fighting chance," (Beasley 2006).

In my opinion, teachers need to do a set number of professional development hours as a part of the condition of employment and certification. Teachers will definitely value increased student achievement as an outcome of professional development, more than any other variable, and judge the value of their professional development activities by how much they see a leap in student learning. As a result, professional development enables teachers to implement new teaching techniques, to help students work collaboratively and develop higher-order thinking skills, to encourage students to be engaged in the learning process, to assist students who have various learning styles and special needs, and to expose students to a broad range of information and experts.

Personal Professional Development Activities and Goals

A wide variety of people, such as teachers, health care professionals, lawyers, accountants and engineers engage in professional development. Individuals participate in professional development because of an interest in lifelong learning, a sense of moral obligation, to maintain and improve professional competence, enhance career progression, keep abreast of new technology and practice, or to comply with professional regulatory organizations. Examples of professional development activities for teachers other than external/online courses could be:

- observing other teachers teaching
- watching a colleague present an assembly
- observing a visiting expert
- shadowing a fellow teacher
- visiting and seeing other schools in action
- observing and working with an artist in residence

When professional development is done well, has the opportunity to change teachers' practice and we know that teachers' practice is the most important factor impacting student achievement. The desired outcome for being engaged in professional development is:

- *Information Transfer* – receiving information about new approaches, techniques, requirements, etc.
- *Skill Acquisition* – being taught a particular way to do something

- *Behaviour Change* - new information and/or skills are taught with the expectation that the new learning will be applied and change behaviour as well.

Professional Development can be very powerful when goals are identified. One may not succeed at every goal, but reviewing progress periodically to measure achievement, will give one an overview of accomplishments. Simply setting the goals will greatly increase the likelihood that one gets much closer to the identified target.

Reasons for my Professional Development
Following are some of the reasons, why Professional Development plays an integral part in an ongoing career growth:
- Professional development training would make me more productive and in turn, could also be profitable for the organization.
- Professional development helps me stay current on the latest educational skills and emerging trends
- Professional development allows opportunity to bring new ideas and best practices to the organization
- Job satisfaction and success are directly linked to continuous upgrading skills and acquiring new information
- When one feels engaged, one works harder and wants to produce the best work possible
- When one feels intellectually challenged, one is more likely to take on greater responsibilities
- Professional development is a cost-effective retention tool

Another important reason for choosing this professional development program is to illustrate that multi-lingual schools, are capable of providing opportunities for students to achieve and sustain high levels of academic excellence even when faced with challenges such as low income levels and a lack of students' English proficiency upon entering school.

"One recent analysis examined the effect sizes of previous research and concluded that, "Study after study has reported that children in bilingual programs typically outperform their counterparts in all English programs on tests of academic achievement in English. Or, at worst, they do just as well". (Krashen and McField 2005)

Therefore, being engaged in a professional development program enables educators to provide students with safe, positive, stimulating and caring environment that encourages the fulfilment of the individual, and the growth of self-esteem in all areas: academic, social and personal.

4. Reporting on Professional Development.
As schools continue to move ahead into different phases of educational reforms, one factor that is consistent in each and every place; is the need for professional development. Educational reform requires teachers not only to update their skills and knowledge but also to totally transform their roles as educators. It establishes new expectations for students, teachers, and school communities that some educators may not be prepared to meet. Professional development helps teachers learn new roles and teaching strategies that will improve student achievement.

"True professional development should be a learning experience for all who are involved …professional development is a purposeful and intentional process designed to enhance the knowledge and skills of educators so that they might, in turn, improve the learning of students" (Guskey, 2002)

Along with the demand for quality professional development, comes the need to be accountable. Professional development programs must be assessed to document their value to the school organization, individual educator, and ultimately the students. To ensure the effectiveness of each professional development effort, the evaluation must be seen as an on-going process that is initiated in the earliest stages of program planning and continued beyond program completion.

"Evaluation can help in choosing the right program, adapting it to your local context, and to fine tune the program once in use". (Guskey 2002)

Identifying the Learning Objectives

Although professional development programs are designed to affect the participants and in turn the students, they typically also have an impact on other stakeholders, administrators, counsellors, principals, and other instructional staff. I believe that affective learning objectives are concerned with the learner's interest in, attitudes toward, and appreciation of a subject. They are generally used where trying is as important as succeeding and include aspects such as 'showing sensitivity to', 'accepting responsibility for', 'being willing to' and 'demonstrating commitment to' improvement and self-realization. Professional Development outcome measures are important, but they present challenges in terms of appropriateness for practice and effectiveness of assessment methods. Outcome measurement implies a causal relationship between education and the effect that can be demonstrated.
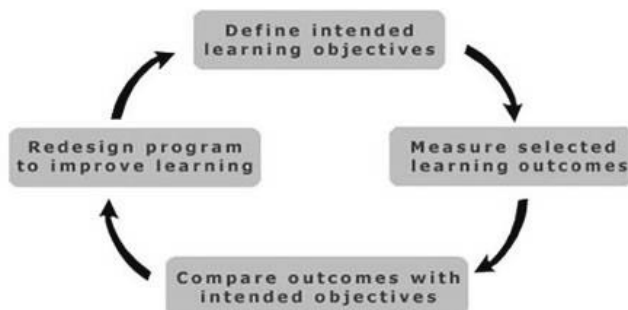
In my opinion, learning objectives of professional development can be categorised into three parts:

- a measurable action,
- the conditions, if any, under which the performance is to occur, and
- a criterion of acceptable performance i.e. standard.

"The growing interest in better understanding what constitutes effective teaching practices, coupled with its power to leverage educational improvement, presents a challenge and opportunity for policymakers to address how to efficiently and reliably measure teacher performance" (Mathers et al 2008)

This reiterates that measuring teacher performance is imperative but can only be done if there are goals and objectives that need to be accomplished in order to be evaluated. It is believed that learning objectives should be stated in terms of learner-behaviour, be specific and measurable, use an action that indicates the depth of understanding expected and be stated precisely using terms that have a uniform meaning and are consistent with other resources, and most of all, it should be realistic. A very apt model of understanding learning objectives and their outcomes is graphed below:

Assessment Primer: The Assessment Learning Cycle, University of Connecticut

The above simple, but effective cycle, by the University of Connecticut shows that in order to improve, there should be an objective and accomplishing this objective will give rise to identifying new ones. Accomplishment of objectives can be measured against the required outcome and, the need for improvement can be implemented only when the intended objectives have not been achieved.

The following are probably some learning objectives that have been identified when the decision to be involved in professional development is made:

- to modify and improve the quality of the relevant program;
- to make adjustment wherever required, ensuring optimal results;
- to determine the effectiveness of continuing professional development on teacher practice, school organisation and student improvement;
- to undergo a change in practice and roles as we move forward towards reform standards for teaching and learning
- to impact on my professional growth and development as an educator; including the nature of growth and changes in professional life, role and responsibilities;
- to impact on school organization and ultimately, student outcome

"Examination of teacher quality focuses on four categories of teacher quality indicators – teacher qualifications, teacher characteristics, teacher practices and teacher effectiveness. The four categories summarize the ways that teacher quality is commonly defined for policy purposes, and they are frequently linked to hiring and career-ladder decision making" (Goe 2007)

Contribution towards Professionalism

A wide variety of people, such as teachers, health care professionals, lawyers, accountants and engineers engage in professional development. Individuals participate in professional development because of an interest in lifelong learning, a sense of moral obligation, to maintain and improve professional competence, enhance career progression, keep abreast of new technology and practice, or to comply with professional regulatory organizations.

"The ability of teachers to organize classrooms and manage the behaviour of their students is critical to achieving positive educational outcomes" (Emmer & Stought 2001)

Classroom management is one of the key performance indicators of professionalism in education and literacy. Where a classroom cannot be managed, knowledge cannot be delivered as the classroom environment is of vital importance in improving student outcomes.

"Although surveys indicate that experienced teachers have fewer concerns regarding classroom management, such surveys may be less of an indication that teachers learn over time how to manage classrooms effectively and more a result of the fact that many teachers who did not learn classroom management skills have simply left the profession" (Baker 2005).

This is just one example of how professional development can improve professionalism in educating and inspiring students to realize their intentions of learning. Experience has allowed me to witness teachers who mismanage class. Although they have been teaching for an extensive period of time, when it came to managing and organizing classroom activities and improving students' outcomes, they had been unsuccessful in achieving the desired result as per required institutional standards. It can affirmed that, with professional development, one could begin to explore management techniques that will nurture a positive learning environment and also establish standards for behaviour. It helps determine the parameters of emotional and physical safety in instructional institution. It helps identify what professionalism and ethics in the classroom means – personally, professionally and institutionally. It also assists to conduct self-evaluation and ethical values to ascertain strengths and areas for improvement

5. Conclusion

"The ability of teachers to organize classrooms and manage the behaviour of their students is critical to positive educational outcomes. Comprehensive teacher preparation and professional development in effective classroom organization and management is therefore needed to improve outcomes for students in general and special education" (Regina & Daniel 2007)

Professional development is a broad term, which encompasses a range of people, interests and approaches. Those who engage in professional development share a common purpose of enhancing their ability to do their work. At the heart of professional development is the individual's interest in lifelong learning and increasing their own skills and knowledge. The 21st century has seen a significant growth in professional development. Content providers also incorporate collaborative web-based platforms such as discussion boards and wikis, thereby encouraging and facilitating interaction, and optimizing training effectiveness. Effectiveness of professional development indicates increased student achievement; increased teacher content knowledge and evidence that the two are linked together in some way. What actually counts, is that teachers need to know what they teach in a specialized way that promotes students' thinking, being able to pose a task, being able to understand their self-evaluation, able to achieve their expectation and most importantly, being able to make decisions. It can be reaffirmed that those students who are educated by teachers with continuing professional development score higher on assessments as the teachers can understand and predict their frame of mind.

With professional development to one's advantage, one is able to realize its value in improving teacher practice, school organization and students outcomes. One is also able to participate in evaluation of other professional development programs. Gathering data by interviewing teachers and other educational professionals, and asking then to examine and discuss current attitudes towards professional development can also be achieved through professional development. With every little bit of assistance in education, is an added brick to the foundation that will only help to competently achieve desired performance, objectives and results.

References

Baker, P. H., (2005). *Managing student behaviour: How ready are teachers to meet the challenge,* American Secondary Education, 33(3), 51 – 64.

Banks, F. & Mayes, Ann Shelton (2012).*Early Professional Development for Teachers*, The Open University, pp 14, London.

Beasley, D. (2006). *Teachers Need Professional Development,* North Carolina Center for the Advancement of Teaching. Retrieved from *http://www.nccat.org/News_Items/Archives/2006/061012.htm*

Bransford, JD, Brown, AL & Cocking, R (2000), *How People Learn: Brain, Mind, Experience, and School*, Committee on Developments in the Science of Learning, National Research Council, National Academy Press, Washington DC.

Darling-Hammond, L & McLaughlin, M.W. (1995), *Policies that Support Professional Development in an Era of Reform.* Retrieved from *www.oest.oas.org/iten/documentos/Investigacion/randd-engaged-darling.pdf*

Elmore, R.F. (2002). *The Imperative for Professional Development in Education.* Retrieved from *www.shankerinstitute.org/Downloads/Bridging_Gap.pdf*

Emmer, E. T., & Stought, L. M. (2001). *Classroom management: A critical part of educational psychology, with implications for teacher education,* Educational Psychologist , 36(2), 103 – 112

Ende, F. (2016). *Professional Development that Sticks*, Retrieved from *https://books.google.co.th/books?id=1DGyCwAAQBAJ&printsec=frontcover&dq=Pr ofessional+Development&hl=en&sa=X&ved=0ahUKEwj1s9jX6dHYAhXMqI8KHdU vCM0Q6AEITjAH#v=onepage&q=Professional%20Development&f=false*

Goe, L. (2007). *The link between teacher quality and student outcomes: A research synthesis.* Retrieved from *www.ncctq.org/publications/LinkBetweenTQandStudent Outcomes.pdf*

Guskey, T.R. (1994). *Professional Development in Education: In search of the optimal mix.* American Education Research Association, New Orleans, LA.

Guskey, T. R. (2002). *Does it Make a Difference? Evaluating Professional Development.* Educational Leadership v. 59 no6, p. 45–51.

Ingersoll, R. (2003). *Is there really a teacher shortage?*" Consortium for Policy Research in Education, University of Pennsylvania. Retrieved from http://depts.washington.edu/ctpmail/PDFs/Shortage-RI-09-2003.pdf.

Jacob, B. A. & Lefgren, L. (2002, April). *The impact of teacher training on student achievement: Quasi-experimental evidence from school reform eff orts in Chicago.* National Bureau of Economic Research Working Paper 8916. Retrieved from

www.nber.org/papers/w8916.

Joyce, B., & Showers, B. (1988). *Student Achievement through Staff Development*. White Plains, NY: Longman.

Krashen, S. and Mc.Field, G. (2005). *.What Works? Reviewing the Latest Evidence on Bilingual Education,* Language Learner, Vol. 1, Issue 2.

Loucks-Horsley, S., Hewson, P.W., Love, N. & Stiles, K.E. (1998). *Designing Professional Development for Teachers of Science and Mathematics.* Thousand Oaks, CA: Corwin Press

Mathers, C., Oliva, M. & Laine, S. (2008). *Improving Instruction Through Effective Teacher Evaluation*. Retrieved from *www.tqsource.org/publications/February2008Brief.pdf*

Miles, K. H., Odden, A., Fermanich, M., & Archibald, S. (2004). *Inside the black box of school district spending on professional development: Lessons from comparing five urban districts*. Journal of Education Finance, 30(1), 1-26.

Regina, M. O. & Daniel, J. R. (2007). *Effective Classroom Management: Teacher preparation and Professional Development*. Retrieved from *www.tqsource.org/topics/effectiveClassroomManagement.pdf*

Shannon, G. S. & Bylsma, P. (2004). *Characteristics of Improved School Districts: Themes from research*. Retrieved from *www.k12.wa.us/research/pubdocs/DistrictImprovementReport.pdf*

The Post-Standard (2009). *Obama's plan for our schools,* Central New York Times. Retrieved from*: http://www.syracuse.com/news/index.ssf/2009/03/obamas_plan_for_our_schools.html*

Tomlinson, H. (2004). *Educational Leadership: Personal Growth for Professional Development,* Sage Publication, London: Athenaeum Press, Gateshead

Westchester Institute for Human Services Research. (n.d.). *The balanced view: Professional development.* New York. Retrieved from *www.sharingsuccess.org/code/bv/pd.html*

Zucker, A. A. (2009). *The Growing need for Professional Development*, National Council of Teachers and Mathematics. Retrieved from *www.nctm.org/resources/content.aspx?id=1632*