

## Service Level Agreement

The professional development proposed by *Proposal: Professional Development for Mobile Devices and Project Management (PDMD&PM)* will be guided with the following specific learning goals the PRDE hopes to achieve<sup>1</sup>:

1. At the end of the teacher professional development program, teachers, especially of Math, Science, English and Spanish, will be able to know how to:
  - a. Use the devices,
  - b. Access PRDE's instructional resources.
  - c. Connect to the PRDE network and understand the causes of the most common types of errors.
  - d. How to integrate technology into the curriculum.
  - e. Understand the PRDE technical support structure (whom to refer to, depending on the type of problem).
  
2. At the end of the professional development program, exiting instructional learning teachers will:
  - a. Update their knowledge on Instructional Technology and learn innovative approaches to teaching and learning.
  - b. Become highly proficient on how to use different softwares and electronic devices and programs, as to be able to train new teachers in the future.
  - c. Become familiar with STEM educational resources, as to be able to assist teachers in incorporating them into the curriculum.
  - d. Identify the best sources of educational technology resources on the Internet, such as Microsoft Educators Community.
  - e. Obtain an Instructional Technology industry certification.
  
3. For OSIATD personnel: Become proficient on the technologies being proposed, as to be able to provide field-technical support services if needed.

The Proposal is for the offering of three modalities: workshops, coaching and demonstrative classes. The participants are all Teachers, especially of Math, Science, English and Spanish, and Technology Specialists from the PRDE Regions of Arecibo, Mayaguez and Ponce. The personnel of OSIATD will also participate. All educators at the identified PRDE Regions will be trained but not every educator will attend every training. There is a different educational path depending on whether they are regular teachers, instructional technology teachers, or OSIATD specialist. Level of previous dominion will be taken into consideration (basic, proficient or advanced). The depth level will be determined by the Assessment the PDMD&PM will execute before the training sessions begin. The duration for each training activity will be determined by the nature of the product, as there are tools that are more easy to use than others are.

The basic training will consider, but not limited to:

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<sup>1</sup> As clarified in the paper *Puerto Rico Department of Education-Responses to Vendor Questions*.

1. How to handle the PC.
2. Difference between sleep/restart/shut down.
3. Fine management, search tool.
4. Types of files, and how to use the help guide.
5. How to navigate the Internet.
6. Locate the most basic tools (Student Information System, Digital Library, and others).
7. Basic troubleshooting, including whom to call to get assistance.

These modalities to be implemented are described as follows:

1. **Workshops/Training Activities**<sup>2</sup>. PDMD&PM will offer workshops for four topics. Each topic will offered in around three to eight days of six-hour training activities, in one or several days with a total of six (6) contact hours each. The participants of the identified Regions will be distributed equitatively, but the number of participants must be no less than 10 and no more than 30 for each group. The workshops or training activities will be held in every PRDE school. If a school have problems that impede training, the PDMD&PM will look for on-site training.

2. **Coaching**. Individual process (1 participant) or group (with a maximum of three people), in charge of people with vast / recognized experience in education, in Instructional Technology and in the subject/academic level in which they will carry out the coaching. The will be integrated into the schools, which aims to implement new strategies, scientifically proven and effective, relevant to the classroom (Knight, 2007)<sup>3</sup>. It will be implemented in each school of Educative Regions that will be served by PDMD&PM, during two (2) and three (3) contact hours.

3. **Demonstration classes**.<sup>4</sup> A demonstration class is a process of face-to-face modeling. It is one of the organizational forms of the methodological work in which the methodological treatment discussed is put into practice and it is demonstrated how the methodological propositions carried out behave. They are done in the presence of students (teachers, Technological Specialists and personnel from OSIATD, in the case of PDMD&PM) to increase the possibilities of exemplification, teachers of experience must be selected and at the end the analysis of the fundamental aspects that respond to the proposed objectives will be conducted. The demonstrative classes will be offered to participants of all schools at the municipality level for two (2) and four (4) contact hours.

4. **Seminars**. Professional seminars will be offered to Instructional Specialists and to personnel of OSIATD at regional level. PDMD&PM will offer seminars for four topics. Each seminar will offered in around three to eight days of six-hour training activities, in one or several days with a total of six (6) contact hours each. The participants of the identified Regions will be

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<sup>2</sup> Training class in which the participants work individually and/or in groups to solve actual work related tasks to gain hands-on experience. Retrieved from <http://www.businessdictionary.com/definition/workshop.html>

<sup>3</sup> Knight, J. (2007). *Instruccional Coaching. A Partnership Approach to Improving Instruction*. Thousand Oaks, California: Corwin Press.

<sup>4</sup> Retrieved from [https://www.ecured.cu/Clase\\_demostrativa](https://www.ecured.cu/Clase_demostrativa)

distributed equitatively, but the number of participants must be no less than 10 and no more than 30 for each group. The seminars will be held in one PRDE school.

The proposed training activities will be on the following topics and sub-topics:

**A. Topic #1: Technology platforms that allow access to educational resources inside and outside the classroom**

These platforms provide a virtual space of permanent support within the reach of the educational community. These platforms also contribute to the development of learning environments, mediated by information and communication technology (ICT) to stimulate ubiquitous and mobile learning, in order to contribute to the human development of the students of the Puerto Rico Department of Education (PRDE). They provide multiple educational resources, which serve as support for students and teachers to carry out collaborative projects that promote self-learning and autonomy in students. These platforms are also used in different colleges and industries. By engaging these platforms at an early stage, we can give an advantage to the students of the PRDE.

**a. Sub-topic 1.1: *Microsoft OneDrive***

OneDrive stores and shares files in the cloud. Accesses and makes changes that will be synchronized automatically, or file settings will be synchronized to view and edit them by computer. It is safe to share files so that others can access them without interruptions and safely. Works faster and smarter in or out of the school. OneDrive allows co-authoring in real time in applications such as Word, PowerPoint and Sway, which saves time by simply using a button to add files to Outlook email messages. The shared use of the application itself allows each teacher and student to share and establish specific access to their files without problems, according to the category of the class.

**b. Sub-topic 1.2: *Microsoft Outlook***

Outlook is another of the tools developed by Microsoft. It is incorporated in the Office 365 program. Its allows teachers and students from all over the world to organize their emails easily, quickly and efficiently, as well as other functions such as calendars, events, contact organizer, among others, turning this program into one of the best tools to maintain direct communication between students and teachers.

**c. Sub-topic 1.3: *Google Classroom***

Google Classroom enables the teacher to: better communicate with students, be more proficient with time, reduce waste (paper vs digital), and better engage the students. The platform functions are not very different from others in the market. What sets Google Classroom apart is that it is completely free and can be downloaded to any mobile device such as a cell phone. On the other hand, it is also more attractive for students, since its platform resembles a social network, such as Facebook. Google Classroom has a wall or board, where assignments, comments

from the teacher and students appear, important dates, announcements from both students like the teacher. Therefore, Google Classroom is really a teaching application focused on social interaction.

## **2. Topic #2: The office 365 application to maximize the effectiveness and efficiency in the teaching process**

The education system of Puerto Rico is in a process of change and academic, cultural, and social updating due to the action of competitive demands and continuous improvement in the training of future professionals, where the incorporation of the use of Information and Communication Technologies in the education system allows to integrate a set of strategies and tools to make visible the reach of excellence in students. This proposal develops and implements an environment of communication and collaboration through the Microsoft Office 365 platform, allowing teachers and students to define new models of collaboration, communication and learning in the classroom.

### **a. Sub-topic 2.1: *Microsoft Word***

Word is designed to help students create quality documents. Word can also help to organize and write documents more efficiently. When a student or teacher create a document in Word, you can choose to start with a blank document or let a single template click on the main part of the job. From here, the basic steps to create and share documents are the same. Word's revision and modification tools allow you to work perfectly

### **b. Sub-topic 2.2: *Microsoft Excel***

Excel is an application that allows both the teacher and the student the accessibility of obtaining a quantitative analysis of large amounts of data immediately. They can also perform analysis with a minimum of factors, and to track any type of information. The key to unlocking all this potential is the grid of the cells. Cells can contain numbers, text or formulas. The data is written to the cells and grouped into rows and columns. This allows to add data, sort and filter them, put them in tables and create very visual graphics.

### **c. Sub-topic 2.3: *Microsoft PowerPoint***

PowerPoint is an application that allows the creation of slides. It allows combining images, texts, graphics, audios, videos and animations, with which the presentations are simplified and simplified. They are used in different areas, such as schools, universities and many other fields. PowerPoint is a tool that simplifies the presentation of topics, through graphics, images, videos and texts that produce a quick and better understanding of what you want to express. PowerPoint has a wide range of tools, among which there are varieties of predesigned templates, with which it is easier to use; besides that, the student and the teacher can make their own templates according to the specific needs, thanks to the different tools that the PowerPoint has.

d. **Sub-topic 2.4: *Microsoft Sway***

Sway is a professional digital application that allows creating stories designed by/for teachers and students to express their ideas through an interactive web-based canvas. The integrated design engine of Microsoft Sway allows to create reports, presentations and other professional documents with great visual appeal without the need to apply much formatting or additional learning. Teachers and/or students can also modify the results to achieve the unique look they are looking for. Microsoft Sway confers an impeccable appearance in its creation or on any screen and allows to send a link to share it with other teachers/students. Microsoft Sway allows to obtain and gather all kinds of content without leaving the application, because teachers/students can drag and drop images, text, videos and graphics onto the canvas.

e. **Sub-topic 2.5: *Microsoft Onenote***

OneNote allows the teacher and the student to have an interactive notebook. Each block of notes includes a content library for teachers who share the course, a collaborative space where teachers and students can work together, and a private block of notes for each student. They can review the notes with pencil annotations, highlighting or typing using the keyboard. Students do not always think the same, but they can share ideas and create collaborations in OneNote. After creating a block of notes for the class, teachers and students can use the OneNote application to access the block on any device.

3. **Topic # 3: The integration of technological resources and "open resources" in the teaching and learning process**

These technological tools can create vigorous and motivational learning experiences that students can take advantage of very well into adulthood. Previous generations learned about the world through books, movies and pen pals from other countries. Currently, students can travel around the world right from their classrooms. The ability to speak with experts about specific research or share lessons related to music, art, computer science and history, regardless of their specialty, provides students with a real-time perspective of life that otherwise would not be possible.

a. **Sub-topic 3.1: *Microsoft Teams***

Teams allow the teacher and the student to instantly access chat conversations, content and Office 365 tools in a single work area. This platform facilitates the workflow in a class while involving students to greater participation. This tool transforms the way teachers and students collaborate in their community as well as in their school. Optimizes staff communication in school-level initiatives of personalized note blocks. This platform creates an attractive environment for teachers and students that allows you to add applications such as SharePoint and OneNote. Take advantage of the channels to organize the team around personalized themes or project groups. Customize notifications to not lose any activity or important information

b. **Sub-topic 3.2: *Microsoft SharePoint***

SharePoint encourages both teachers and students to work in teams with dynamic group sites and products for each project, department and division. Share files, data, news and resources. Customize each site to simplify the team's work. They will find what are looking for with a single touch for the effective search function and the smart ways to get information, knowledge and details to make decisions and put it into practice. The rich content management of SharePoint, as well as the valuable connections and conversations of Yammer, allows its organization and maximizes the speed of knowledge exchange.

c. **Sub-topic 3.3: *Microsoft Yammer***

Yammer helps teachers to improve the participation of all students. It also Improve communication to promote transparency, keep everyone from teachers to students, informed and aligned. It allows creating educational communities of interest to gather students and teachers around a common theme, interests or areas of practice. Gather ideas and comments from class and/or work mates list for others' work and achieve better results. As part of Office 365, Yammer facilitates the sharing, creation and editing of content from within the application. All the selected groups have a set of resources to manage documents, display content, share notes and organize responsibilities. Easily integrate Yammer into all sites and video transmissions so that the conversation can continue as you go from one experience to another.

4. **Topic # 4: Tools to facilitate the assessment and use of data for instructional decision making**

These tools, called audience response systems, can be a very important aid for the evaluation of real-time learning by the teacher, as well as a motivating element that helps improve the results of students in different subjects and increases participation in the classroom. From the student's perspective, the use of mobile devices during class is a special attraction that can easily become a motivating element.

a. **Sub-topic 4.1: *Kahoot***

Kahoot is a platform for the student and the teacher. The designed questionnaire can include images and videos. Each time the teacher decides to activate a questionnaire, a session with an identifier is enabled. Students to connect to the activity use this identifier. One question each time a maximum response time is assigned. Once this time is over, no more replies are allowed. The teacher decides if the student responds at his own pace within a certain time or if he/she is the teacher who controls the flow of the questions, so that the student only answers the question that the teacher establishes at that moment. After each question shows the score of the five best students. This score is based on the problem of each question and the quick response, that is, the students who answered are different. Finally, the teacher can obtain the individual answers, as well as the choices obtained in a file. At the end of each questionnaire, he/she can activate a brief survey about the activity, where the students indicate, with a rating on a scale of 1 to 5, if they have learned, if they liked it and how they have felt doing the activity.

b. **Sub-topic 4.2: Socratic**

Socratic provides a platform for the student and another for the teacher. The teacher initially designs the questionnaire, in which images can be included. The teacher has assigned a class with an identifier and sets in motion the questionnaire that he wishes to be carried out. He also decides if the student responds at his own pace to the answers or if he himself controls the flow of the questions, in such a way that the student only answers the question that the teacher establishes at that moment. He/She can also ask, on the fly and quickly, a question for the student to answer. Socratic allows the elaboration of questionnaires to assess what the student has learned in that class session and how he has assimilated it.

Table 2 presents the programmatic plan for the implementation of PDMD&PM.