

Needs Assessment Report
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Instructional Problem

A private elementary school in the Phoenix metro area plans to deploy Apple Macintosh laptops for each student in the intermediate elementary grades for the 2022-2023 school year. As a result, the intermediate-level elementary teachers at this school need technical skills and classroom technology integration training. Instructional designers conduct a needs assessment report when there is "the introduction or rollout of a new product (Morrison et al., 2019, p.31). The intermediate-level elementary teachers at this school need technical skills training on how to use the computer software on these laptops. Further, these teachers need additional technical skills training on how to teach computer software skills to their students and "how to integrate this technology into their curricula" (Morrison et al., 2019, p. 30). The following needs assessment report will address the instructional problems of computer software technical skills training and teaching technology integration skills to elementary teachers.

Purpose and Reason for Needs Assessment

The needs assessment plan will outline an effective and efficient training plan for the intermediate elementary teachers at this private school in the metro Phoenix area (Morrison et al., 2019). Classroom instruction utilized technology before the introduction of classroom laptops; however, this has taken place on a limited basis. The media center at this private metro Phoenix school has two iPad carts for classroom use. There are twenty-eight teachers in kindergarten through fifth grade at this school. These K-5th grade teachers routinely use the media center's two iPad carts for approximately 300 students. However, a kindergarten through fifth-grade teacher might only have access to an iPad cart for two or three days per month due to limited availability. Finally, school administration and parents were strongly motivated to

support the classroom laptop initiative because of the teacher's desire and willingness to regularly integrate technology into classroom instruction.

The needs assessment will address the school's stakeholders' anticipated or future needs. The instructional design process can focus on any planned change "so that any needed training can be designed prior to implementation of the change" (Morrison et al., 2019, p. 35). For example, all intermediate-level elementary teachers at this Phoenix metro private school must effectively integrate technology into classroom instruction for the upcoming 2022-2023 school year. Therefore, the school administration is currently planning "for the appropriate training before the teachers start the year and difficulties develop with the technology" (Morrison et al., 2019, p. 35).

Goals

This needs assessment plan will propose a technology integration course to instruct teachers on techniques for integrating computer technology into classroom learning and instruction. Additionally, these teachers will develop pedagogical methods for teaching computer software skills to their students. To achieve these two goals, teachers will learn the computer software skills they will need to teach their students. Next, they will practice these skills and then screencast themselves as they teach these computer skills. The third section of this course involves teachers learning successful pedagogical techniques for integrating technology into content area instruction and learning. Lastly, teachers will design, plan, and present technology integration lessons to their colleagues.

Problem Statement

To facilitate classroom environments that integrate technology into classroom instruction, all intermediate-level elementary teachers should receive effective and efficient training on computer software technical skills and technology integration skills.

Target Audience

The target audience for the proposed training is elementary teachers who are mid-career or veteran teachers; however, they are beginners at technology integration in classroom settings. Teachers have basic to intermediate skills with some technology software, but some software is entirely new. The new classroom technology is both exciting and overwhelming. Teachers want to integrate technology into the main content areas, such as language arts, math, science, and social studies. Therefore, teachers need technical software skills training to teach their students these skills. Once students are proficient with the computer software, teachers can integrate the technology into their content area classroom lessons.

The main characteristic of this target audience is adult learners. These learners will require a training program that is structured systematically, relevant and integrates the teacher's own pedagogical experience (Morrison et al., 2019). In addition, the training will take place during after-school hours, so time is an important consideration. The instructor for this proposed training is a former teacher and computer teacher who is well-versed with technology integration. Therefore, the target audience should be confident and assured of his prior education and experience. These adult learners will participate in hands-on, practical learning activities with direct classroom application (Morrison et al., 2019).

Primary Audience (training will be mandatory for all intermediate-level elementary teachers)

- All current intermediate-level elementary teachers

- Elementary school principal
- Reading Specialist

Secondary Audience

- Any primary-level elementary teachers
- Any primary or intermediate-level student teachers

General Learner Characteristics

- Age: 36-62 years old
- Gender: 13% men, 87% women
- Education: Undergraduate through a graduate degree in education
- Job role certifications
 - Elementary education, K-6 Arizona license
 - Reading specialist, K-12, Arizona license
- Work experience: 16 to 25+ years of elementary education teaching experience

Entry Characteristics

- **Prerequisite skills and knowledge.**
 - No teachers have formal computer software skills training
 - Approximately 75% of the elementary teachers have professional development technology integration training using iPads, not computer laptops

Attitudinal and motivational characteristics:

- The direct link of course training to job performance creates high motivation to course training
- Course training participants are strong advocates of classroom laptops, so they are eager about the course training

Prior experience:

- 100% of the training participants have computer laptops for professional use
- 100% of the training participants have basic to intermediate skills using Microsoft Word and Microsoft PowerPoint
- None of the training participants have experience with integrating computer laptops with classroom learning
- None of the training participants have taught students how to use computer software skills

Common errors made by novice learners:

- Computer software skills training for students lacks scaffolding techniques
- Computer software skills training is haphazard and not systematic
- Insufficient computer software skills training can impede technology integration in content areas

Instructional Needs

The proposed computer software skills and technology integration online training course for intermediate elementary teachers will teach Microsoft Word and Microsoft PowerPoint computer software skills training. Additionally, teachers will receive technology integration teaching methods for technology integration into the reading and social studies curriculum. Specific Microsoft Word computer software skills training will include word processing and editing skills that include working with the following: pictures, bulleted lists, fonts, text, editing, lines, line spacing, lists, and layering. Specific Microsoft PowerPoint computer software skills training will include design and editing skills, including working with the following: slide fonts,

slide layout, pictures, backgrounds, and text boxes. At the end of the technology integration course, teachers will:

- Develop the computer software skills needed to teach their students.
- Create a series of screencasts that teach computer software skills to their students.
- Construct pedagogical techniques for integrating technology into content area instruction and learning.
- Design, plan, and present technology integration lessons to their colleagues.

Resolution of the Instructional Problem

Effective, systematic, and practical training must occur for successful technology integration into classroom instruction and learning (Roblyer & Hughes, 2019). In addition, evidence has demonstrated that specific training areas must include computer software skills training for teachers and students (Arney, 2015). Next, the software skills training for elementary students needs to be applied and include scaffolding techniques to facilitate learning. Furthermore, academic literature has shown that teacher training needs to include pedagogical techniques for integrating technology into content area instruction and learning (Roblyer & Hughes, 2019). Finally, fellow teachers and educational technology teachers can serve as digital change agents to help facilitate the process of technology integration into classroom learning by serving in essential roles (Gura & Education, 2018).

Conclusion

The needs assessment plan addresses the future needs of intermediate-level elementary teachers of a private school in the metro Phoenix area. The training goals of this plan will include computer software skills and technology integration pedagogical techniques. Effective, practical, and efficient training sessions will provide these elementary teachers with appropriate skill sets to integrate technology confidently into classroom instruction and learning.

References

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