ABSTRACT
Of all the tasks that special education teachers are charged with completing, managing classroom behaviors has been reported as one of the most challenging and one of the top reasons the teachers are leaving the field. The task of providing effective support in classroom management is also daunting for leadership personnel in school systems. This paper provides four components that should be considered when planning a professional development (PD) package for teachers regarding behavior management. These four components include didactic presentation, performance feedback, technology, and maintenance and generalization. These components have been proven to be effective in the current field of research. Further examples and supportive details regarding each component and how to create an effective PD package are provided in this paper.

KEYWORDS
Classroom management, professional development, teacher education

According to the U.S. Bureau of Labor Statistics (2022), special education teachers are typically responsible for assessing skills and needs, adapting materials and lessons, developing and implementing Individualized Education Programs (IEPs), mentoring students, and tracking progress towards goals for students with psychological, neurological, physical, and/or learning disabilities. Additionally, the Individuals with Disabilities Education Act (IDEA) requires that the team must address the behavioral needs and provide support through a student’s IEP whose behavior impedes their learning or that of others. Often referred to as behavior management, these supports can include a variety of individualized strategies and materials. For the purpose of this paper, we define classroom management as a set of skills, practices, and strategies that teachers use to maintain productive behaviors that allow for effective instruction in the classroom (Flower et al., 2017; Gage & MacSuga-Gage, 2017; Stevenson et al., 2020). The ultimate goal of behavior management is to decrease disruptive behaviors in order to increase learning and academic achievement. This can be done through explicitly teaching and reinforcing the expectations and procedures of the classroom.

Of the many daily tasks and jobs a special education teacher is responsible for, behavior management is consistently reported among the top reasons for leaving the profession (Sciuchett, 2019). In fact, White and Mason (2006) conducted a survey of new special education teachers in the U.S. following the implementation of a mentor pilot program. The results of the survey reported that 60% of the respondents needed assistance and/or asked their mentor for help with behavior management within their first year of teaching. Furthermore, experienced teachers also reported a lack of knowledge and ability in the area of classroom management (Watson, 2006). Many teachers lack confidence in their behavior management skills and do not feel effectively equipped with strategies to manage behaviors in the classroom (Mitchell & Arnold, 2004). Because of the lack of specific training, special education teachers do not feel prepared to han-
dle the variety of difficult behaviors that can be present in special education classrooms (Myers et al., 2017). According to Ledford et al. (2018), in order for teachers to create the most positive learning experience for students, they must implement successful individual behavior management strategies in their classrooms.

**CLASSROOM AND BEHAVIOR MANAGEMENT DEVELOPMENT IN TEACHER PREPARATION PROGRAMS**

As previously stated, classroom and behavior management skills are vital for preservice teachers to develop prior to entering their own classrooms. Unfortunately, novice teachers often report not feeling appropriately prepared to manage their own classrooms upon graduation (Scott, 2017). Freeman and colleagues’ (2014) extensive literature review indicated many preservice teachers may not be prepared to effectively manage a classroom post-graduation due to a lack of exposure to the content. According to Garland et al. (2016) the most effective way to learn and master classroom management skills is through real-life classroom experiences. Unfortunately, the experiences of preservice teachers are typically limited to practicum and internship placements that may not provide the extensive support and development needed to master classroom management skills (Simonsen et al., 2008). These experiences are often limited in duration, accessible to direct in-classroom support for immediate feedback, and variability in student behavior which can lead to inconsistent experiences. Additionally, these experiences are often considered high stakes given their link to grades and sometimes graduation. Because of the high-stakes nature of these experiences the student teachers often rely on procedures for behavior management already put in place by mentor teachers instead of creating their own or exploring novel options. Similarly, preservice teachers who are completing a practicum or student teaching experience have a short amount of time to create rapport with students and therefore rely on their mentors’ procedures that have already been put in place. In summary, there is a lack of authentic learning opportunities for pre-service teachers where they can experience the challenging classroom behaviors that may be part of their teaching career.

**FIGURE 1: Four Components for High Quality Professional Development**

<table>
<thead>
<tr>
<th>DIDACTIC PRESENTATION</th>
<th>PERFORMANCE FEEDBACK/COACHING</th>
<th>TECHNOLOGY</th>
<th>GENERALIZATION AND MAINTENANCE</th>
</tr>
</thead>
</table>

**CLASSROOM AND BEHAVIOR MANAGEMENT SUPPORT IN THE FIELD**

Participation in meaningful PD for in-service teachers has proven to improve the job satisfaction of special education teachers (Grant, 2017; Washburn-Moses, 2005). Unfortunately, teachers are seldom provided comprehensive and effective training to improve their behavior management skills in the classroom (Lerman et al., 2004; Loiacono & Allen, 2008; Morrier et al., 2011). Currently, new teachers entering the field receive minimal mentoring or support in behavior management (Grossman & McDonald, 2008) and are forced to learn as they work. PD tends to be a one-day workshop with limited chances for practice or follow-up support beyond the training day (Wilkinson et al., 2021). These PD sessions, often referred to as “sit and get” sessions, may increase the teacher’s knowledge (State et al., 2019) but they do not create lasting improvements in teacher skills (Nishimura, 2014).

Another important missing piece to implementing behavior management in special education classroom is that the fidelity of implementation in the school setting is often overlooked (Sanetti et al., 2014). Fidelity of implementation refers to the degree to which an intervention is delivered as intended (The IRIS Center, 2014). Lack of implementation fidelity can result in decreased efficacy of an intervention which in turn may result in a decrease in the desired student response (Grow et al., 2009; Noell et al., 2002). This need can be addressed through creating PD packages that include practice opportunities for teachers to apply their newly learned skills.

Given the previously described issues surrounding special education teachers managing behavior in the classroom, changes to our current practices in pre-service teacher preparation and in-service teacher development are needed. Substantive changes have the potential to positively impact teacher attrition.

**SUGGESTED PROFESSIONAL DEVELOPMENT COMPONENTS**

In the existing literature on this topic, four components for developing special education teachers in classroom management emerge. Figure 1 shows the four components that were found to be successful in improving implementation fidelity following a classroom management PD experience for pre-service or in-service special education teachers. Research supports
FIGURE 2: Behavior Professional Development Component Checklist

Didactic presentation

☐ Present information in multiple formats
  ☐ Present information visually (e.g., PowerPoint)
  ☐ Provide a permanent product to teachers (e.g., Handout)

☐ Provide step by step instructions for implementation

☐ Provide teachers with a clear rationale

Performance Feedback/ Coaching

☐ Embed structured practice sessions (e.g., role play, simulation)

☐ Provide practice in real-time with students (e.g., iCoaching, teleconferencing)

Technology

☐ Utilize video modeling

☐ Make training computer-based to increase accessibility (e.g., pre-recorded video, webcams)

☐ Get creative! (e.g., content acquisition podcast, self-based computer modules, or mixed reality)

Generalization and Maintenance

☐ Schedule administrator check-in observations

☐ Schedule peer to peer follow up observations

Notes and General Observations:
using a combination of all four of these components when planning a behavior management PD to produce successful outcomes for teachers (Rispoli et al., 2016; Walker et al., 2021). The first component, didactic presentation, is an instructor-directed method in which the teacher delivers, and the student receives content (Bethune & Wood, 2013; Flynn & Lo, 2016; Kunnavatana et al., 2013a; Kunnavatana et al., 2013b; Pas et al., 2016; Randolph et al., 2019; Rispoli et al., 2016; Shillingsburg et al., 2021; Walker et al., 2020; Walker et al., 2021). The second component, technology, includes any form of interactive technology incorporated in the PD package (e.g., tele-conferencing or mixed-reality setting; Digennaro-Reed et al., 2010; Flynn and Lo, 2016; Machalick et al., 2010; Miller & Uphold, 2021; Pas et al., 2016; Randolph et al., 2019; Rispoli et al., 2016; Shillingsburg et al., 2021; Walker et al., 2020; Walker et al., 2021). The third component, performance feedback and coaching, includes the portion of PD where the teachers, paraprofessionals, or preservice teachers are provided with feedback following an observation of implementation either in the classroom for a coaching session or in a practice session (Bethune & Wood, 2013; Kunnavatana et al., 2013a; Kunnavatana et al., 2013b; McKenney & Bristol, 2015; Mouzakis et al., 2015). Finally, generalization and maintenance are the fourth component of change which is a portion of training that ensures the participant can continue to implement the trained intervention over time and in different settings (Bethune and Wood, 2013; Kunnavatana et al., 2013b; Mouzakis et al., 2015; Rispoli et al., 2016; Walker et al., 2021).

**DIDACTIC PRESENTATION**

The first recommended component of high-quality PD on behavior management is a didactic presentation. By presenting the necessary information regarding an intervention, a didactic presentation has been found to be an effective first step in a PD (e.g., Bethune and Wood, 2013; Flynn and Lo, 2016; Kunnavatana et al., 2013a; Kunnavatana et al., 2013b). Figure 2 shows the recommended components for an effective didactic presentation. For example, a didactic presentation should include visual presentation of the information. This information can be presented through PowerPoint (Bethune & Wood, 2013), guided notes (Randolph et al., 2019), or a brief teaching guide (Walker et al., 2021).

Additionally, an explicit explanation of step-by-step instructions for the procedures of the intervention should be included. Kunnavatana et al. (2013a), started their training on implementing a trial based functional analysis (TBFA) with a one-hour didactic presentation that included basic behavior principals, a brief introduction to functional analysis (FA) methodology, and a description of the procedures of a TBFA before moving into practice sessions. By starting with an informative didactic training, Kuavatana and colleagues were able to present the necessary information required to successfully complete a TBFA. Under the umbrella of step-by-step instruction, also falls the introduction to any support materials that may be required in order to successfully implement the intervention. For example, if the intervention requires lesson plans (Walker et al., 2020) or a training manual (Shillingsburg et al., 2021), these materials should be covered thoroughly during the didactic presentation.

Finally, it is recommended that a didactic presentation include a description of the rationale for why the intervention is effective and should be implemented by the teachers. By including this information in the PD, the trainer is helping the teacher better understand the development and efficacy of the intervention which will in turn improve their implementation fidelity. Flynn and Lo (2016), included the rationale and purpose of using a TBFA and differential reinforcement of alternative behavior (DRA) with students with autism spectrum disorder (ASD) or behavior disorders in their training of three middle school teachers. In this study, the three teachers reported that the training was very beneficial, and two out of the three teachers were able to implement a TBFA with high procedural fidelity when generalizing the skills to a new student.

**PERFORMANCE FEEDBACK/COACHING**

When planning a behavior management related PD for special education teachers the next recommended component is performance feedback and coaching. As depicted in Figure 2, performance feedback is referred as the portion of PD that is a collaborative procedure which can include praise for correct implementation, constructive feedback for incorrect implementation, rehearsal of missed implementation, and review of progress (Coddington et al., 2008). Coaching is defined as any feedback or guidance that is provided on the rehearsal or implementation of the intervention (Kretlow & Bartholomew, 2010). Previous research has demonstrated a functional relationship between performance-based feedback and increased teacher fidelity (Schles & Robertson, 2017). Related to behavior management interventions, research has shown an increase in fidelity following coaching sessions (PBIS; Filcheck et al., 2004; FBA implementation; Bethune & Wood, 2013; email coaching; Miller & Uphold, 2021; iCoaching; Rispoli et al., 2016; roleplay with coaching; Walker et al., 2021). Performance feedback and coaching can be provided immediately following an observation of implementation or can be provided later through written feedback. For example, McKenney and Bristol (2015) provided weekly performance feedback following observations as well as feedback connected to role play practice opportunities regarding the implementation of discrete trial training (DTT). This study demonstrated that most teachers require performance feedback to perform a trained skill with high fidelity. Delayed coach-
ing, which may be best for administrators who are observing teachers but cannot provide feedback right away, can be provided via different modalities. For example, Miller and Uphold (2021) provided coaching emails within 24 hours of each classroom observation regarding the implementation of behavior specific praise (BSP) in the classroom. These emails included a behavior specific praise statement regarding the teacher’s appropriate implementation of BSP in the observation and as an attachment included the most recent graph of the number of BSP statements they used during the fifteen-minute observation.

Furthermore, performance feedback and coaching has been used in coordination with mixed reality settings. Mixed reality environment is the blending of real and synthetic content (Hughes et al., 2005). More specifically, mixed reality refers to a broader form of a virtual experience by blending the typical visual and auditory aspects of virtual reality with real assets (Dieker et al., 2008). This is an excellent training method for teacher preparation programs especially because a supervisor can tailor the scenario to the participant’s needs. For example, Pas and colleagues (2016) used TeachLive, an immersive, mixed-reality simulator that provides practice opportunities with immediate feedback to train teachers in behavior management skills. Following the rehearsal session in the TeachLive setting, all participants demonstrated improvements in implementation fidelity. TeachLive is a flexible option for teacher preparation programs and school systems because it can be used remotely, therefore, rural school districts could access the equipment and provide opportunities to remotely practice and give feedback to teachers in training.

One of the most feasible ways to provide performance feedback to teachers is by including role play or rehearsal opportunities in training sessions (Flynn & Lo, 2016; Kunnavatana et al., 2013a; Kunnavatana et al., 2013b; McKenney & Bristol, 2015). This is a respectable way for teachers to quickly apply their learning following a one-day or didactic PD session in a safe and controlled environment before implementing the trained intervention in the classroom with students. During the rehearsal sessions the participants could be matched with an expert who was then able to provide immediate performance feedback throughout the practice. Teacher participants can be matched with one another for rehearsal or role play sessions while an expert or the trainer has the option to observe, answer questions, and provide performance feedback (Shillingsburg et al., 2021). An example of how universities can support local school systems is through performance feedback and coaching either in person or virtually. Kunnavatana et al. (2013b), conducted a training session on implementing the TBFA. Following the didactic presentation, participants were matched with a graduate student from the university to conduct role playing sessions. The graduate student then provided immediate performance feedback and answered questions.

**TECHNOLOGY**

The third recommended component of behavior management PD for special education teachers is technology. There are many types of technology that have been used to train teachers such as mixed-reality settings, video models, bug-in-ear communication systems, or tele-conferencing. Recently, Education Week reported that 40% of schools offered one device per child (Cavanagh, 2018). With the increase of technology to support the academic performance of students in classrooms, there should be an increase in technology to support teacher performance.

Digennaro-Reed et al. (2010), used individualized video modeling to increase the accuracy of implementation of behavioral interventions across three teachers. Not only did the teacher’s performance increase, but the teachers reported that they found the video modeling more socially acceptable by rating it positively. The individualized instructional videos demonstrated accurate implementation of the intervention with the student and included voice-over and on-screen text that detailed the relevant parts of the intervention. The teachers were then asked to implement the intervention with their students within 45 minutes of viewing the video. Individualizing the videos can look like recording the teacher implementing the skill appropriately in a practice session or another teacher implementing the same skills appropriately.

Machalicek and colleagues (2010), also incorporated technology via a device/computer-based option. More specifically, a provided camera and laptop computer were set up in the classroom and they used video tele-conferencing to train teachers to assess challenging behaviors of students with ASD. Using the camera and chat feature of the computer, a supervisor provided real time performance feedback via webcam technology which helped each teacher participant improve in implementation fidelity. Using real time performance feedback via webcam technology has the potential to give teachers and administrators access to outside personnel who may have expertise in certain behavior management skills that would not be available. Another option to incorporate technology into behavior management PD for teachers includes a content acquisition podcast (CAPs; Miller & Uphold, 2021). CAPs are an enhanced type of podcast which delivers instruction through still visual images and audio recordings that explain the content (Kennedy, 2011). Self-based computer modules are another way to disseminate PD materials to teachers in a more flexible manner meaning outside of a traditional one-day sit in training (Shillingsburg et al., 2021). In Shillingsburg et al. (2022), staff participants completed 22 hours of self-paced, commercially available online computer-based modules that included pre-tests, video lessons, and concept checks.
GENERALIZATION AND MAINTENANCE

The final component that is recommended for a behavior management PD is generalization and maintenance. Maintenance data refers to the extent the intervention procedures are continued after the research is completed (Kennedy, 2005). This is important to include following the PD session because if the intervention is effective on student behavior, then the intervention procedures should be used continually. A maintenance phase would happen post-training to examine if the trained teacher is still able to perform the behavior intervention with high fidelity without the support provided during the training phase. For example, Bethune and Wood (2013), collected teacher implementation data following the coaching intervention once a week until 2.5 weeks after the last participant completed the intervention phase. Taking maintenance data is a simple way to provide additional support to teachers following an intervention to ensure that the time spent in the PD was not wasted. This can be as simple as a brief in-person or virtual observation using one of the technology options described above by an administrator, outside expert in the field, or fellow teacher who has also been trained.

Generalization can be defined as the ability for the participant to perform a skill under different conditions. Rispoli and colleagues (2016) trained six teachers to implement two functional analysis models through a “training package.” Following the training package which included role play to practice, in situ generalization data were collected by the researcher to discover if the teacher participants were able to apply the training to their classrooms. It is important to include a generalization phase in teacher preparation and PD to ensure that teachers can transfer the trained intervention into the classroom with high fidelity. This could be implemented in a PD for preparing teachers to use BSP to increase on-task behaviors by conducting brief classroom observations following the training. In order to be more feasible for school districts, teachers could observe one another in the classroom setting or have BSP be a part of the administrator’s observation checklist. In teacher preparation programs, after training preschool teachers to use BSP, generalization could occur during their practicum or student teacher observations by adding BSP to the observation tool used to assess their performance.

CONCLUSION

The previously mentioned recommendations are a call to action for administrators and teacher preparation programs to enhance the PD opportunities for preservice and in-service special education teachers especially related to behavior management interventions. There is a need to reform teacher preparation and PD methods by creating more extensive and interactive opportunities that will increase implementation fidelity. Additionally, when planning behavior and classroom management PD sessions, administrators and teacher preparation programs should include multiple components and should not rely on only one mode of training (i.e., PowerPoint or technology). The current literature surrounding special education teacher preparation indicates that PDs with multiple components are more likely to increase implementation fidelity.

Finally, classroom technology is rapidly improving, and a renewed emphasis should be placed on not only the technology to support students, but also the technology that can be used to support the growth of teachers. Through mixed reality settings, virtual communication technologies, and other innovative technology, schools across the country can have equal access to high quality PD as well as a variety of experts in the field of behavior and classroom management. Teachers who are better prepared can be more effective in improving the academic performance and behavior of their students. By supporting teachers in a much-needed area like behavior management, the current teacher shortage crisis could be positively impacted.

REFERENCES


ABOUT THE AUTHORS

Chelsea Marelle
Chelsea Marelle, M.Ed., is a Ph.D. student at Georgia State University. She has her Bachelors’ degree in Early Childhood Education from Valdosta State University and her Master’s degree in Special Education from Vanderbilt University. She was a special education teacher for five years where she served as an elementary resource, cross category, specific learning disability, and autism self-contained classroom teacher. Her research interests include special education teacher preparation programs and professional development, behavior and classroom management, and autism specific classroom interventions. Marelle has presented at state, national, and international conferences, and contributed to several articles.

Claire Donehower Paul
Claire Donehower Paul is an assistant professor in the Department of Learning Sciences at Georgia Southern University. She received her doctorate from the University of Central Florida in the Exceptional Education Program. Her research focuses on improving academic, social and behavioral outcomes for students with autism spectrum disorders (ASD) using innovative technology. Prior to her doctoral studies, Donehower worked at the Kennedy Krieger School Programs for nine years as an assistant teacher, special education teacher and assistant principal. She received a B.A degree in psychology from Boston College and an M.S. degree in special education of severe and profound disabilities from the Johns Hopkins University. Additionally, Donehower is a board-certified behavior analyst and has post-graduate certificates in the Education of Students with Autism and Other Pervasive Developmental Disorders and Special Education Leadership and Administration.


