

A Framework for an Inclusive Education Professional Development Program¹

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Abstract

With the inclusion of Special Education Needs (SEN) students in public schools in many countries, there are increasing demands for designing professional development (PD) programs that meet the needs of in-service teachers in inclusive education settings. This paper proposes a framework for creating a PD program for in-service teachers who are teaching SEN students. Based on the results of a need assessment questionnaire and interviews administered to a group of in-service teachers in Egypt, the researcher suggests some guidelines for designing PD programs for in-service-teachers in inclusive contexts. The framework describes the program objectives, content and materials, assessment tools, timing, and duration, and the potential challenges and ways to overcome them.

Resumen

Con la inclusión de estudiantes con necesidades de educación especial (SEN) en las escuelas públicas de muchos países, existe una creciente demanda de programas de desarrollo profesional (PD) que satisfagan las necesidades de los maestros en servicio en entornos de educación inclusiva. Este documento propone un marco para crear un programa de PD para maestros en servicio que trabajan con estudiantes con necesidades educativas especiales. Basado en los resultados de un cuestionario de evaluación de necesidades y entrevistas administradas a un grupo de maestros en servicio en Egipto, la investigadora sugiere algunas pautas para diseñar programas de DP para maestros en servicio en contextos inclusivos. El marco describe los objetivos del programa, el contenido y los materiales, las herramientas de evaluación, el tiempo y la duración, y los posibles desafíos y formas de superarlos.

Introduction

Well-designed professional development programs are critical for teachers to successfully cope with the requirements of educational growth and improve their instructional practices. Professional development (PD) in the workplace can take different forms to improve teachers' professional skills. Teachers can attend workshops and seminars, review relevant research and journals, collaborate with colleagues and experts, and observe classes to improve their pedagogical skills and perceived ability to teach (Buford & Casey, 2012). However, it is complicated to design sustainable PD programs due to the interaction of a variety of factors such as learning objectives, trainees' attitudes and age, the scope of desired change, learning context, available facilities, and trainees' professional needs (Oyedele & Chikwature, 2016).

Several factors that contribute to the creation of effective PD programs in inclusive education. First, teacher-related factors consist of their training needs, attitudes, and practices. Allison (2012) claims that general education teachers, who are teaching school subjects, in inclusive settings put teaching pedagogies as the top priority of PD programs to improve their instruction in inclusive classrooms. Teachers should be trained in creating objectives, strategies, materials, and assessment tools to be useful to students with special education needs (SEN). Amr (2011) believes that best practices in inclusion include: a) mastering the subject matter, child development, and instructional approaches; b) supporting and reinforcing students development; c) encouraging positive learning environment; d) providing further instruction to SEN students; e) offering support from administration and school community; f) providing cooperative co-teaching and communication, and g) equipping schools with adequate facilities and resources.

Nevertheless, most general education teachers and special education teachers fail to meet the needs of SEN students in mixed-ability classes because they have insufficient communication skills and negative attitudes towards teaching in inclusive classrooms (Ghoneim, 2014; El-Zouhairy, 2016). Smith et al (2016) argue that there are institutional, attitudinal and knowledge barriers to the implementation of inclusion since attitudinal challenges lie in the negative perceptions of school staff about SEN students. The lack of sufficient knowledge about dealing with SEN students is considered a barrier to the successful application of inclusive pedagogy. These barriers cause low enrollment of SEN students in general schools, lack of awareness of inclusion, inadequate preparation and training, along with a lack of comprehensive laws and policy framework to confirm adherence.

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Second, institutional and ecological factors play a critical role in designing PD programs. These factors include physical arrangement of classrooms, schedules, and assigning teachers to classes. Udoba (2014) mentions that large class sizes, poor learning environment, and limited additional support services from authorities are barriers to provide effective instruction to SEN students. He recommended the availability of specialized training facilities, adequate resources (human and materials), and training of special education teachers for successful inclusion.

Therefore, policy makers and program designers should consider a number of factors that contribute to the development of effective PD programs. These factors include-but not limited to- the individualization of the educational programs to the needs of learning disabled students, utilization of effective management skills, adoption of inclusion policy by school staff, maintenance of a positive attitude towards inclusion and SEN students, offer of adequate knowledge and skills about inclusion, and provision of effective in-service training and pre-service education programs (Awad, 2016; Seçer, 2010).

To identify the professional needs of in-service teachers in relation to inclusion, the researcher created and administered a need assessment questionnaire and interviews with 218 English as a Foreign Language (EFL) teachers who work in public primary schools in Gharbia, Egypt. She reported the findings in her study (Ali, 2018) and recommended the creation of contextual PD programs concerning inclusive education. In this paper, the researcher offers a framework for designing a PD program based on the findings of this previous study.

PD Programs of Inclusive Education in Egypt

There are two kinds of teacher education programs in Egypt: pre-service and in-service. Universities usually provide pre-service programs, while PD programs are delivered to in-service teachers by the Ministry of Education (MoE) or academic institutions. Therefore, the researcher conducted a content analysis of the courses taught at Egyptian universities about special education and found that only a few courses were offered and they were based on the medical model of disability and the psychology of exceptional children. The result of this analysis was supported by Awad's (2016) findings that pre-service teachers in Egypt did not get adequate information or skills about inclusive education to teach in inclusive contexts.

Analysis of the PD programs including inclusive education indicated the existence of some programs provided by the General Director of Special Education Office (GDSEO) in the MoE in partnership with other organizations regarding inclusion. These programs included Makaton Dictionary for Verbal Communication, Training Of Trainers (TOT) in Inclusive Education and Special Education, Teacher Preparation Program to Deal with SEN Students, PD Program for Developing Teachers' Skills of Special Education, Integrating Technology in Education, Inclusive Education Caravan, Ministry of Communications and Information Technology Training, Training in Inclusive Pre- and Primary Schools to Teach Blind Students, and Refresher Course of Readability (Ministry of Education, 2015-2016).

In addition, the United Nations Children's Fund (UNICEF) in Egypt (United Nations Children's Fund, 2016) called for an integrated model of inclusion that encourages the use of appropriate teaching methods, adapted curricula and material, effective school administration and leadership, ongoing supervision and follow-up, well-trained and qualified teachers, as well as flexible school policies. To that end, UNICEF started an initiative with the help of the MoE in November 2017 to prepare teachers in public schools to deal with SEN students in limited-resourced schools. About 91 school psychologists, special education coordinators in schools, special education specialists in directorates, resource room teachers, and teachers of Arabic and math took part in this four-session program. Each training day was divided into two parts; an introduction to identification and characteristics of common learning disabilities in schools, and a workshop on creating simple teaching aids for these disabilities (MoE, 2015-2016).

However, it seems from this review that these PD programs are limited in scope, time, and the number of attendees. Moreover, since most of these top-down programs are not based on participants' needs assessment, they are generic in terms of objectives and outcomes and not specifically designed to meet the needs of participants in their local contexts. Alkhateeb et al (2016) indicate that general school teachers are required to develop an awareness of the needs of SEN students; use appropriate instructional strategies (e.g., cooperative learning, peer-mediated instruction, co-teaching, response to intervention, differentiated instruction); employ various tools of assessment, and train students on appropriate learning strategies. Consequently, in-service teachers should receive appropriate PD programs to gain the knowledge and skills

to effectively play their roles in inclusive settings, which requires continuous, large-scale, and setting-based PD programs.

Findings of the Need Assessment Questionnaire and Interviews

A questionnaire of 35 items and semi-structured interviews were administered to 218 EFL teachers, as reported in Ali (2018), to identify their training needs regarding teaching in inclusive contexts. The analysis of descriptive statistics of questionnaire items showed that participants prioritized the needs to know effective instructional strategies followed by the need to make curriculum adaptations then, by developing Individual Educational Plans (IEPs). Moreover, respondents showed a high demand for knowing preventive techniques for behavioral problems of SEN students and monitoring classroom rules and routines. Ali (2018) also reported that the respondents highly needed to be trained on differentiating learning disabilities from language and communication disorders. These findings were consistent with the needs the interviewees identified in the semi-structured interviews. Moreover, regarding PD delivery, participants preferred face-to-face seminars and workshops, mentor-supported, individual as well as project-based learning, online conference/webinars, and lectures. Morning training was preferred by 68.16% of the participants compared to 24% preferred afternoon training. Additionally, a 3-hour workshop in the weekdays is preferred to a 45-minute or 90-minute workshop during the weekends. These findings aligned with Siddiqui (2006) and Moeini (2003), who found that participants preferred PD activities in the form of workshops over online sessions.

Framework for a PD Program in Inclusive Education

The framework focuses on the top five topics specified by participants from EFL teachers in Ali's (2018) study. To design the framework, these questions were considered:

1. How is the program designed to achieve the objectives?
2. What content and materials are included?
3. How will learning outcomes will be assessed?
4. What time is best according to trainees' preferences?
5. What are the potential challenges or problems and ways to overcome them?

The target audience for this proposed framework is EFL teachers who teach in inclusive contexts. The framework was built upon the five needs that participants perceived vital when dealing with SEN students. The framework is flexible to allow modifications to suit other teachers and grades. The overall goal of the framework is to develop in-service EFL teachers' knowledge and skills to effectively teach SEN students and manage inclusive classes.

Objectives and outcomes:

Knowledge and understanding

Trainees will be able to develop an understanding of effective strategies to meet SEN students' needs and manage inclusive classes through:

1. Differentiating between learning disabilities and language and communication disorders.
2. Defining speech disorders and language disorders.
3. Identifying types of language disorders.
4. Recognizing the causes and symptoms of language disorders.
5. Familiarity with the skills affected by language disorders.
6. Identifying criteria for selecting the appropriate instructional methods.
7. Familiarity with teaching methods suitable for SEN students.
8. Defining methods to accommodate instruction and EFL materials to SEN students' needs.
9. Identifying principles of adapting curriculum and materials.
10. Recognizing types of adaptation.
11. Discussing the Universal Design for Learning (UDL) applications as a method to individualize instruction.
12. Defining an IEP and determining which students require an IEP.
13. Identifying the components of IEP.
14. Recognizing the teacher's role in developing IEPs.
15. Familiarity with the purpose and process of creating IEPs.
16. Identifying the tools required for developing IEPs.

17. Familiarity with who attend the IEP meetings.
18. Identifying preventive techniques to control behavioral problems of SEN students.
19. Discussing behavioral problems in inclusive classes.
20. Familiarity with the characteristics of a supportive learning environment.
21. Identifying some techniques for effective classroom management.

Professional and practical skills

Trainees will be able to develop professional and practical skills to meet SEN students’ needs and manage inclusive classes through:

22. Diagnosing language disorders.
23. Applying effective strategies for meeting the needs of students with language disorders.
24. Using appropriate teaching methods to teach EFL to SEN students.
25. Applying criteria for selecting appropriate methods.
26. Using teaching methods suitable for SEN students.
27. Accommodating instruction and curriculum to SEN students’ needs.
28. Implementing suitable methods/techniques for adapting EFL materials.
29. Adapting lessons to reach all students.
30. Using UDL applications as a method to individualize instruction.
31. Developing IEPs to anticipate students’ needs.
32. Participating effectively in IEP meetings.
33. Collaborating with parents and special education teachers to develop IEPs.
34. Preventing and controlling behavioral problems of SEN students
35. Establishing a preventive rather than a reactive discipline
36. Using successful techniques for effective classroom management.

Content

The content is created to suit a five-day training of three hours. Sufficient time was given to practical skills and implementation. Table 1 displays the topics of the sessions and the allotted time.

Day	Objectives / skills	Sessions	Topics	Duration
1	1, 2, 3, 4, 5, 22, 23	1	Speech and language disorders: Definitions Types of language disorders (receptive language, expressive language, and mixed receptive-expressive language) Causes and symptoms Skills affected by language disorders Differences between learning disabilities and language and communication disorders	40 minutes
		2	Diagnosis of language disorders: Reading disorder (word recognition, reading comprehension) Writing disorders and dysgraphia (writing process, writing product) Spelling disorders Spoken and written language disorders Strategies for meeting the needs of students with language disorders	80 minutes
		3	Practicum (demonstrations & presentations on types of language and speech disorders and strategies to be used in class)	40 minutes
2	6, 7, 8, 24, 25, 26, 27	1	Criteria for selecting appropriate methods (disability/need, target skills, time, and resources, etc.). Teaching methods suitable for SEN students: providing appropriate scaffolding and learning strategies (e.g., prompting and cueing strategies, rehearsal, modeling, labeling, chunking, and repetition). Peer-mediated instruction. Tiered assignments.	40 minutes
		2	Teaching methods suitable for SEN students: instruction in phonemic awareness and phonics, listening and note-taking, increasing wait time and extra-time; offering further tuition and provide supplementary resources, teaching in relevant contexts and stress meaningful content, providing opportunities for students to learn English for varied purposes and with different audiences; and	80 minutes

		using different aids and methods to present information.	
	3	Practicum (demonstrations & presentations on selecting suitable methods to teach English skills)	40 minutes
9, 10, 11, 28, 29, 30	1	Adaptation of curriculum: Principles Process of selecting and implementing curricular adaptations Types of adaptation	40 minutes
3	2	Methods/techniques for adapting EFL materials Adapting instructional strategies to SEN students' needs Adapting lessons to reach all students An Introduction to UDL applications as a method to individualize instruction	80 minutes
	3	Practicum (demonstrations & presentations on designing adapted materials and lessons)	40 minutes
12, 13, 14, 15, 16, 17, 31, 32, 33	1	Developing IEPs: Definitions and related terms Determining which students require an IEP Components of IEP Who produces an IEP?	40 minutes
4	2	Purpose and process (planning, implementation, evaluation) Teachers' roles in developing IEP Tools required for developing IEPs IEP meetings Collaborating with parents and special education teachers	80 minutes
	3	Practicum(demonstrations & sample of participants' IEPs)	40 minutes
18, 19, 20, 21, 34, 35, 36	1	Preventing behavioral problems in inclusive classes Characteristics of a supportive learning environment (physical & social) Preventive (versus Reactive) discipline Types of behavioral problems in inclusive classes	40 minutes
5	2	Techniques for effective classroom management: promoting a climate of positive peer pressure. conflict resolution. tips for preventing and defusing aggressive behaviors and crisis situations; anger management. behavior support plan. system of positive behavioral interventions and supports; and teacher/peer reinforcement to promote appropriate student behavior.	80 minutes
	3	Practicum (case studies & role plays on handling behavioral problems and preventive techniques)	40 minutes

Table 1. Topics and time for the proposed PD program

As shown in the table above, each training day was divided into 3 sessions. The first session (40 minutes) is an introduction to lay out the foundations and theoretical bases for the topics. This is followed by an 80-minute session on the practical steps and methods for implementation. The training day is concluded by a practicum in which participants give presentations and demonstrations, prepare lesson plans and IEPs, conduct role-plays, and discuss case studies to ensure their mastery of the materials and assess their development. This session lasts for 40 minutes and the trainees are required to work individually or in groups to finalize a project or task. A ten-minute break separates the three sessions.

Training methods/ format

Practical workshops, mentor-supported learning and team, and project-based learning were specified to be the best methods for receiving training. Various mediums or formats should be offered so that teachers can choose between face-to-face or online workshops. In addition, journals, forums, and articles about inclusive education should be available. In the case of budgetary limits, PD events can be provided at the school levels through training units and SEN coordinators in schools. Experts and specialists in SEN can be part-time visitors to schools on regular bases to offer support and mentorship.

Time/duration

Teachers can attend a series of 3-hour sessions during weekdays over several weeks or months. More than one schedule for training can be offered for teachers to choose from. If PD activities should be provided after the school day, it is better to limit them to 90 minutes instead of 3 hours.

Evaluation methods

Both formative, as well as summative evaluation, will be used to assess trainees' improvement. Evidence will include trainees' interaction logs, samples of assignments and projects, observation notes, teachers' reflections, student improvement plans, trainers' grading sheets, achievement tests, and trainees' portfolios,

and lesson plans. Moreover, there should be follow-up and support after the training from mentors, specialists, administrators, and Special Needs Departments.

Potential challenges/solutions

The first challenge might be the difficulty in evaluating or monitoring teachers' learning activities. To overcome this challenge, administrators or supervisors can monitor teachers while training units at schools can follow-up and provide the necessary support to overcome barriers. Special Needs Departments should provide administrators with rubrics or observation checklists for assessing teachers after receiving the necessary training to effectively use these tools.

Moreover, due to time and budgetary constraints, a small number of teachers will receive the training. This barrier can be removed if those teachers transmit the training to their colleagues as a requirement for getting their certificates with the help of training units at schools. Partnerships with universities and special education institutions to provide effective PD activities and discounted courses to in-service teachers should also be considered. As a result of inadequate training conditions and lack of resources, PD activities might be limited to theoretical rather than practical knowledge. To overcome this, more emphasis can be given to practice by scheduling systematic practical activities with SEN students and opportunities to communicate and collaborate with special education specialists, along with studying cases of SEN students.

Conclusion

To enhance PD programs provided to in-service teachers who are teaching SEN students in inclusive context, the researcher suggests this framework to specifically provide teachers with adequate knowledge in teaching methods, individualized instruction and creating IEPs, classroom management techniques, evaluation methods, knowledge to identify and meet the needs of SEN students in EFL classes, and general knowledge and non-academic skills. Other aspects and skills can be added to expand the scope of this framework based on needs assessment of teachers' training needs in different settings. Furthermore, factors related to teachers, administration, policies, and environment must be considered when adapting this framework to other contexts. Program designers must address the different needs of SEN students in inclusive classes and identify the challenges they encounter, and consider them in creating PD programs. Consequently, decision makers are expected to implement necessary adaptations in curriculum, teacher education programs, and classroom environment to help improve the quality of education provided to SEN students.

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