Effective Components in New Principal Induction Program: A Systematic Review

Aney Marinda Muhammad Amin, Norasmah Othman, Aida Hanim A. Hamid

Faculty of Education, Universiti Kebangsaan Malaysia, Bangi, Malaysia
Email: aneyamin@gmail.com, lin@ukm.edu.my, aidahanim@ukm.edu.my

Abstract

Induction is one of the main supports that can help new principals develop the skills, confidence, and attitudes needed to produce high-performing leaders. However, systematic literature reviews related to the implementation of effective new principal induction program around the world are limited. Therefore, this study was conducted to identify effective components in the implementation of induction programs among principals, especially in the early stages of their service. This systematic literature review is conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method based on two main databases, namely Web of Science and Scopus. The results showed three themes that appear in an effective induction program, particularly in terms of structure, content, and process. Meanwhile, 11 sub-themes have been identified, which explain the main components in detail. Further studies on the need for new principals in the aspect of leadership and guidance should be carried out to identify factors that can maximize the effectiveness of a principal and the development of a precise induction process.

Keywords: Components, New Principal, Induction, Systematic Review.

Introduction

While a positive school culture may be considered the most important for program implementation and teachers are the key factors to student achievement in the classroom, principals are still responsible for ensuring that school culture and teacher effectiveness are of high quality (Herman et al., 2017; Hargreaves & Fullan, 2012). Studies have found that principals are the second most important influence on students other than teachers (Boren et al., 2017; Wallace Foundation, 2013). The role of principals is very important in creating a learning environment for students' academic success and this is directly related to strong and effective school leadership (Hermann, 2016). Similar to teachers, principals also need continuous professional support to keep up with current changes to maintain progress and achievement in order to continue to be successful. However, the support given to new principals is limited and their professional development needs are not met (Acton, 2021; Ford et al., 2020). Therefore, principals need a structured support system, especially in carrying

out new tasks such as the implementation of induction programs (Darling-Hammond et al., 2007).

In general, induction programs provide an opportunity for new principals to enhance positive and reflective elements in the professional development of leaders at an early stage of their careers (Herman et al., 2017). The role transition from teacher to leader is a complex learning and reflection process that requires socialization to new practices, identities, and roles (Wardlow, 2008). The socialization process includes three different stages, namely the anticipatory stage, which begins as soon as the candidate accepts the new position, the encounter stage where the new principal faces various task challenges, and the internal stage where the school community finally accepts the newly appointed principal (Lovely, 2004). In the context of induction, new principals engage in professional socialization that includes knowledge related to the roles, rules, procedures, processes, and technical skills of a leader. In addition, they are also involved with organizational socialization, which refers to the learning process about the methods and actions that need to be taken after holding the position of principal (Hertting, 2008). The implementation of a comprehensive induction assists new principals in the aspect of professional development through the socialization process more effectively (Aiken, 2002).

Literature Review
Induction for new principal is a complex endeavor (Wilmore, 2004), developed based on different concepts and features according to the needs and direction of the organization (Darling-Hammond, 2010). Nevertheless, the diversity of features and components in induction programs must be identified to ensure their effectiveness in developing the quality of principals. In general, one of the key components of effective new principal induction programs is coaching and mentoring (Lochmiller, 2014; Turnbull et al., 2013). The coaching process is carried out over a period with the setting of specific objectives and skills that the new principal must achieve (Grissom & Harrington, 2010). Meanwhile, mentoring is a creative approach that encourages the overall growth and development of individuals toward improving their professional practice with the guidance of an experienced mentor (Bush, 2018; Talley & Henry, 2008). Knowles et al., (2005) stated that coaching and mentoring should be consistently implemented with all aspects that support adult learning. Therefore, those components are important to help new principals facilitate the process of transferring new learning to the school environment and ultimately maintain those practices in performing their duties (Kraft et al., 2018).

Based on the literature, there are gaps regarding the effectiveness or the lack of induction programs for new principals (Dotres, 2020). The issues identified involve the purpose and nature of the induction program, which requires two alternative approaches, namely management reinforcement and professional development (Bush, 2018). Therefore, principals need to manage various areas including organizational structure, human resources, finance, conflict, and efficient resource management (Naidoo, 2019; Ulrick & Bowers, 2013). The complexities of running a school in the 21st century require a wider range of knowledge and skills, especially for new principals (Bush, 2018). Furthermore, the shift in the role of leaders nowadays, particularly from management to different forms of leadership, highlights the need to identify effective components in principal professional development programs (Lochmiller & Mancinelli, 2019; Neumerski et al., 2018).

Based on such criticisms and shortcomings, it is important to ensure that today's induction programs for new principals are improved, especially with effective components that support their work throughout their careers (Westberry & Zhao, 2021). To identify the essential components of new principal induction programs, elements of pre-service and in-service training must be considered as part of a broader learning continuum rather than as separate and uncoordinated programs (Darling-Hammond et al., 2007). In addition, the program curriculum should also be examined continuously and cumulatively, as well as appropriate to the level of knowledge of the participants and adjusted to improve learning (Peterson, 2002). In other words, the content of the curriculum should be adapted to help new principals deal with complex realities while performing their duties.

Therefore, this study was conducted to identify effective components in new principal induction programs using the Systematic Literature Review (SLR) method. In general, SLR is used to identify, evaluate, and summarize specific themes in the literature (Mariano et al., 2017). This method is suitable to be applied in social sciences and humanities (Mangas-Vega et al., 2018) to assess the validity and quality criteria of existing work, and to identify weaknesses and inconsistencies (Paré et al., 2015). Thus, the objectives of this study are to identify publication trends related to effective new principal induction programs in terms of year and country of publication, as well as to identify effective components in the implementation of the program.

Methodology

The method used to analyze articles to answer the research question involves four main steps. The first step involves the use of Preferred Reporting Items for Systematic Reviews and Meta-Analyses or PRISMA as a protocol for the systematic literature review. This is followed by obtaining the articles related to new principal induction program from the databases. Subsequently, the third step involves the process of selecting articles using a systematic literature review and, finally, the steps end with the process of abstracting and analyzing data to obtain the results of the study.

Prisma

This study uses the PRISMA method as the basis for reporting SLR. Generally, PRISMA provides a set of items as a guide to help researchers improve SLR reporting (Mariano et al., 2017). PRISMA has also been designed to identify, select, evaluate, and synthesize studies in various fields including social or educational interventions through an extensive database of scientific literature at a given time (Page et al., 2021). The reporting method using PRISMA is recommended to avoid fundamental errors in reporting systematic reviews and meta-analyses (Selçuk, 2019).

Resources

The data sources used in this study consist of Web of Science (WoS) and Scopus. These two databases are the primary and most comprehensive sources of publications from journal selection to large-scale bibliometric analysis and research evaluation practices at all levels (Pranckutė, 2021). The WoS core collection contains a wide range of documents in biomedical sciences, engineering, social sciences, arts, and humanities with more than 21,000 journals and 111,000 books, as well as more than 8 million conference papers (Stahlschmidt, S. & Stephen, 2020). Meanwhile, Scopus is a comprehensive database for research results worldwide with more than 25,100 titles from more than 5,000 international publishers in

various fields such as science, technology, medicine, social sciences, as well as arts and humanities (Elsevier, 2020). The main advantage of Scopus lies in terms of quantity control and a systematic indexing system (Martín-Martín, 2018).

Systematic Review Process of Article Selection
　　　The article selection process is carried out in three stages, namely the stage of collecting articles from the database, followed by the stage of screening articles, and finally the stage of determining articles that are eligible for information and data extraction.

　　　Identification. The collection of articles began by identifying keywords for searches related to the research question. Keyword selection was carried out by referring to the thesaurus, dictionary, and past research. Next, the article search process was carried out on each of the designated databases, namely Scopus and WoS, using keywords as shown in Table 1. A total of 311 and 231 related articles were obtained from the WoS and Scopus databases, respectively. Therefore, the total number of articles obtained from both databases is 542.

Table 1
Key Search Terms

Databases	Keywords Used
Web of Science	"school principal* induction" "school leader* induction"
Scopus	"novice OR beginning OR new* OR early AND principal* AND induction" "novice OR beginning OR new* OR early AND school AND leader* AND induction"

Screening. Before the screening process, a review to identify articles with duplications was carried out. As a result, 172 articles were identified and excluded from the screening process. Meanwhile, 370 articles were screened according to the predetermined criteria as shown in Table 2. The article search is limited to document type, field of study, language use, and year of publication. The selected language is English, while the document types include articles, reviews, and proceedings papers. The selection of articles is focused on the field of education and social sciences published from 2000 until 2022. Based on the screening, 125 articles did not meet the predetermined criteria and were, thus, removed from the list. Therefore, the review process for 245 articles continued at the third stage, which is eligibility.

Table 2
Inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Language	English	Non-English

Document Type	Article, review, book review, proceedings paper	Note, book, book chapter, editorial materials
Field	Educational research & social sciences	Other than educational research & social sciences
Timeline	2000-2022	<2000

Eligibility. In the third stage, an article review was conducted by reading the titles and abstracts of all 245 articles with reference to the research question on induction programs for effective new principals. Most of the articles, which included 185 articles, are not related to the study. Therefore, a total of 60 articles were reviewed and examined through full reading by excluding some aspects such as (i) induction programs for novice teachers, (ii) preparatory programs for principals, (iii) professional development for experienced principals, and (v) challenges for new principals. Based on the review, 44 articles did not meet the criteria and were excluded, while 16 articles were eligible for review and analysis. In summary, the literature review process of this study is shown in Figure 1.
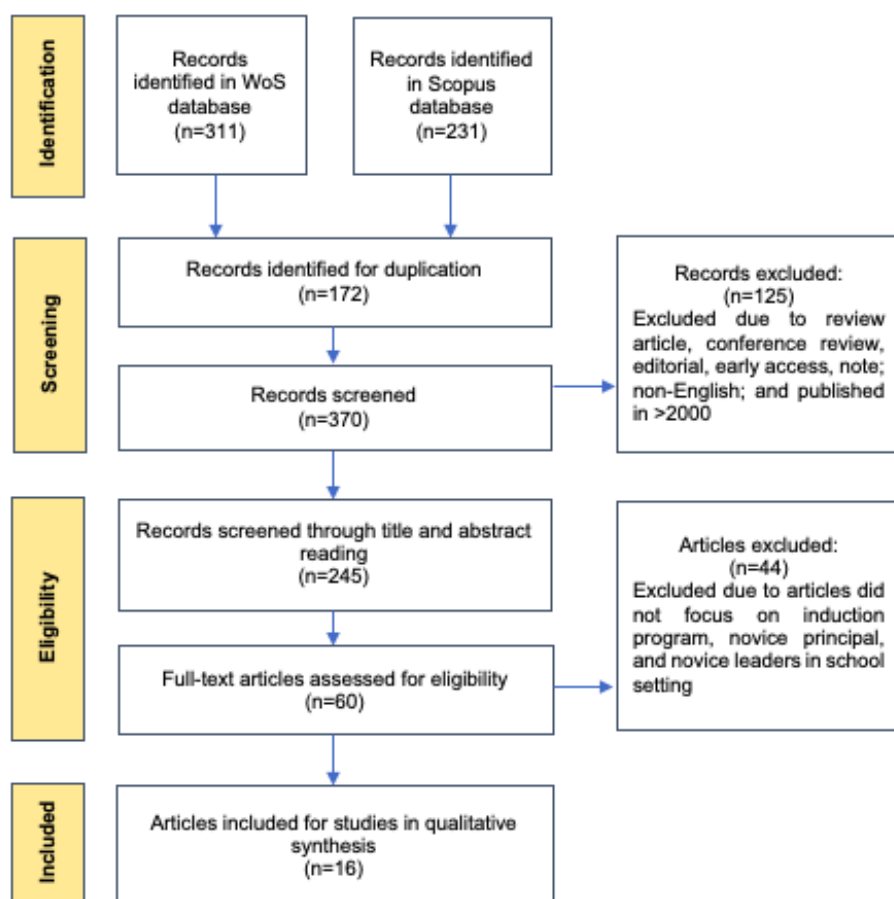

Figure 1 Research flow diagram (Adapted from Moher et al., 2009)

Data Abstraction and Analysis. The last step involves an in-depth review of 16 articles to be analyzed. Data were synthesized using qualitative methods by conducting content analysis. The data extraction process was carried out through an in-depth reading of full articles to develop appropriate themes based on thematic analysis. Raw data were compiled and then converted into usable data through coding methods. Next, the themes developed

were revised to ensure their alignment with the aims and objectives of the study. In summary, data regarding publications related to induction programs for effective new principals are shown in Table 3.

Table 3
Overview of the studies of selected articles

Author	Year	Country	Studies
Steinberg & Yang (2020)	2020	USA	Does Principal Professional Development Improve Schooling Outcomes? Evidence from Pennsylvania's Inspired Leadership Induction Program
Browne-Ferrigno & Fusarelli (2005)	2005	USA	The Kentucky Principalship: Model of School Leadership Reconfigured by ISLLC Standards and Reform Policy Implementation
Galdames & Montecinos (2017)	2017	Chile	Digital Learning for North Carolina Educational Leaders
Bush (2018)	2018	United Kingdom	Preparation and induction For School Principals: Global Perspectives
Bush & Oduro (2006)	2006	South Africa	New principals in Africa: Preparation, Induction and Practice
Robinson et al. (2006)	2006	New Zealand	Catering for Diversity in a Principal Induction Programme
Lochmiller (2014)	2014	USA	Leadership Coaching in an Induction Program for Novice Principals: A 3-Year Study
Silver et al. (2009)	2009	USA	Supporting New School Leaders: Findings from a University-Based Leadership Coaching Program for New Administrators
Meyer et al. (2019)	2019	New Zealand	Novice Principals Setting Goals for School Improvement in New Zealand
Assan & Lumadi (2013)	2013	South Africa	Effectiveness of the Induction Programme for School Principals in the North West Province
Martin & Robertson (2003)	2003	New Zealand	The Induction of First-Time Principals in New Zealand - A Programme Design
Watts (2022)	2022	Australia	Supporting Beginning Principals to Survive and Thrive in the Role: A Systematic Review of Literature
Digwamaje & Assan (2012)	2012	South Africa	Nature and Characteristics of the Induction Programme for Primary School Principals in the North West Province, South Africa
Connolly et al. (2002)	2002	United Kingdom	The Development of the Professional Headship Induction Programme in Wales
Holligan et al. (2006)	2006	United Kingdom	Becoming a Head Teacher: The Perspectives of New Head Teachers in Twenty-First-Century England
Theodosiou & Karagiorgi (2017)	2017	United Kingdom	Primary school heads' professional socialization and leadership development in Cyprus

Overall, the systematic literature review has found a total of 542 articles related to induction programs for effective new principals from the WoS and Scopus databases, as shown in Figure 1. Subsequently, the review at the second stage, which is screening, has identified and excluded a total of 172 articles with duplications. In addition, the selection was conducted based on criteria such as the type of document (article, review, book chapter, proceeding paper, conference paper), language (English), year (< 2000), and field of study (education, social science). As a result, a total of 125 articles were excluded. However, 245 articles were reviewed by reading the titles, abstracts, and full texts in detail at the eligibility stage. Of that number, most of the articles (227 articles) are not related to the study, and the number of articles eligible to be synthesized was reduced to 16. Therefore, a qualitative analysis was conducted on the 16 articles.

i) Publications According to Country and Year

Based on the review of 16 articles selected for this study, there are six countries involved in publications related to induction programs for new principals. The countries include the United States (Lochmiller, 2014; Steinberg & Yang, 2022; Browne-Ferrigno, & Fusarelli, 2005; Silver et al., 2009), the United Kingdom (Bush, 2018; Connolly et al., 2002; Holligan et al., 2006; Theodosiou & Karagiorgi, 2017), New Zealand (Robinson et al., 2006; Meyer et al., 2019; Martin & Robertson, 2003) South Africa (Bush & Oduro, 2006; Assan & Lumadi, 2013; Digwamaje & Assan, 2012), Australia (Watts, 2022), and Chile (Galdames et al., 2017). Specifically, the articles include four studies in the United States and the United Kingdom, three studies in New Zealand and South Africa, as well as one study in Australia and Chile, as shown in Figure 2.
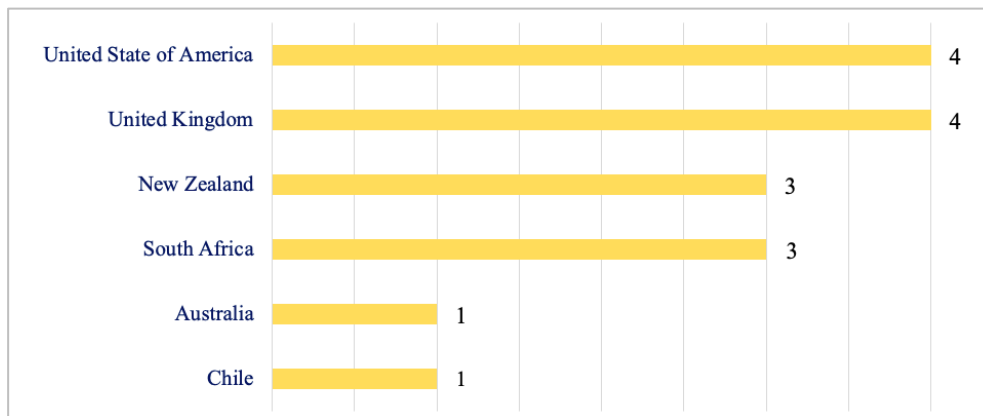

Figure 2 Countries in which the studies were conducted

On a global scale, studies related to induction programs for new principals are most often conducted in Europe, specifically four times, involving studies in England and Wales, United Kingdom. Four other previous studies were recorded in North America, namely in California, Kentucky, and Pennsylvania, United States. This is followed by four studies in Oceania with three studies conducted in New Zealand and another study in Australia. Meanwhile, in Africa, three studies related to new principals were conducted in South Africa and one study was also recorded in South America, namely Chile.
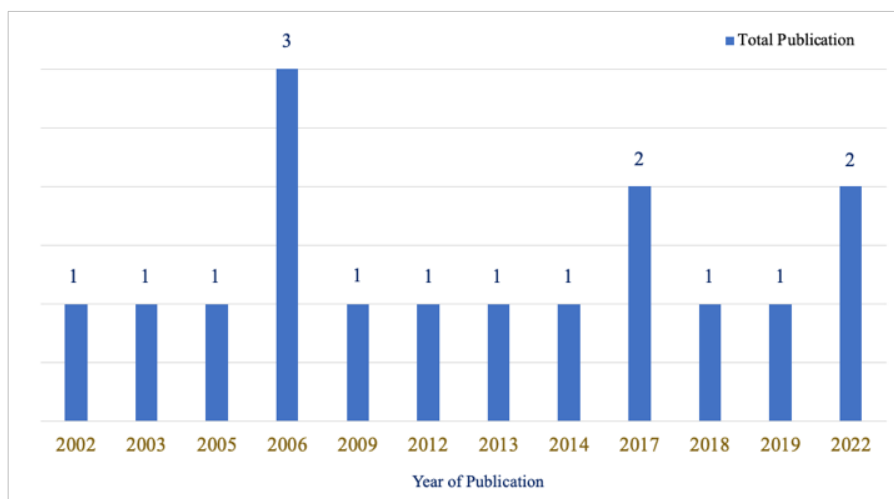
Figure 3 Year of publication

ii)   Effective components in Principal Induction

To answer the second research question, an analysis was conducted on the 16 selected articles to obtain themes related to effective components in induction program for new principals. The components identified according to the articles are shown in Table 4. Based on the analysis results, three main components were identified, namely (i) program structure, (ii) content, and (iii) process. The program structure consists of residential programs, professional learning, and professional networks, whereas the content component includes strategic leadership, managerial leadership, instructional leadership, human resource leadership, and cultural leadership. Meanwhile, the process component involves coaching and mentoring, interpersonal relationships, and monitoring and evaluation.

Table 4
The effective components in principal induction according to studies

Author & Year	Components/ Themes	Aspects/ Sub-themes
Bush & Oduro, (2006)	▪ Content	▪ Administrative capacity ▪ Professional capacity ▪ Personal capacity ▪ Interpersonal capacity
Browne-Ferrigno & Fusarelli, (2005)	▪ Content	▪ Instructional leadership ▪ School management ▪ Interpersonal skills and other professional responsibilities
Galdames & Montecinos, (2017)	▪ Content	▪ Human resource leadership ▪ Cultural leadership ▪ Managerial leadership ▪ Instructional leadership
Silver et al. (2009)	▪ Process	▪ Selection and recruitment of mentors ▪ Selection and recruitment of mentors ▪ Relationship building between mentors & mentees ▪ Mentoring programs
Connolly et al.	▪ Program	▪ Professional profile

Author & Year	Components/ Themes	Aspects/ Sub-themes
(2002)	structure	▪ Mentoring system and associated mentor training program
		▪ Peer-network system
		▪ Training and support directory
Digwamaje & Assan, (2012)	▪ Content	▪ School Administration
		▪ Instructional Leadership
		▪ Finances
		▪ School governance
		▪ Labour Relations
Assan & Lumadi, (2013)	▪ Process	▪ Proper time management
		▪ Conducts monitoring and evaluation (before & after induction)
		▪ Quality assurance mechanism
Theodosiou & Karagiorgi (2017)	▪ Program structure	▪ Networking with past heads
		▪ Mentoring and coaching
		▪ Networking with peer cohort
Meyer et al. (2019)	▪ Content	▪ Teaching and learning
		▪ Culture and diversity
		▪ Relationships
		▪ Strategic planning
		▪ Developing self
		▪ Managing resources
Steinberg & Yang, (2020)	▪ Content	▪ Strategic planning
		▪ Create organizational vision
		▪ Able to transfer
Robinson et al. (2006)	▪ Program structure	▪ Educational leadership
		▪ Commitment to ensuring and improving positive learning outcomes
		▪ Learning focused
		▪ Building relationships
		▪ Strategic planning and management
		▪ Self-efficacy
Watts, (2022)	▪ Content	▪ Opportunities to learn from other principals
		▪ Developing positive relationships with mentors
		▪ Exercising personal agency to create professional support networks
Lochmiller, (2014)	▪ Process	▪ Instructional coaching
		▪ Facilitative coaching
		▪ Becoming a community of practice
Martin & Robertson, (2003)	▪ Program structure	▪ Developmental phases (getting started, leading learning, school organisation and development, future directions)
		▪ Action plans
		▪ Principals' portfolios

Author & Year	Components/ Themes	Aspects/ Sub-themes
		▪ Assessment of needs and reflection
		▪ Leadership coaching
		▪ E-Community for asynchronous learning and support
		▪ Residential program
Bush, (2018)	▪ Content	▪ Administrative leadership
		▪ Professional leadership
Holligan et al. (2006)	▪ Content	▪ Collaboration
		▪ School improvement
		▪ Training
		▪ Standards and achievement
		▪ Social inclusion
		▪ Financial matters
		▪ Time-management
		▪ Leadership

Discussion

The literature related to induction program for effective principals is rather limited and the country's involvement in the formal implementation of induction programs is also scarce (Bush, 2018; Ghimire, 2019). This is in line with the findings for the first research question where only six countries were involved in the production of the articles, namely the United States, the United Kingdom, New Zealand, South Africa, Australia, and Chile. For instance, the United States and the United Kingdom produced the highest number of articles. Since 2000, the professional development of new principals has been expanded and strengthened with the emergence of international research networks across countries such as the United States, Australia, the United Kingdom, Canada, Germany, Mexico, New Zealand, and South Africa (Weinstein et al., 2016). This includes improving the implementation of induction programs to ensure that new principals benefit from the support provided in their first year of service (Hanover Research, 2017).

The findings of the study also showed that Australia and Chile published only one article related to induction programs for new principals in schools. Based on the TALIS report, a third of principals in Australia reported that they have never participated in formal training before or since being appointed (Freeman et al., 2014). Meanwhile, in Chile, induction programs for principals have only been widely implemented since 2016 (Weinstein et al., 2017). According to Bush (2018), an induction program entails a continuous process of improving the principal's leadership skills starting from the succession plan until in-service training. In addition, the approach used in induction programs is aimed at promoting the professional and instructional learning of new principals; however, this matter is only emphasized in central administration in most countries such as Africa, Asia, and Europe (Bush, 2018). Nonetheless, the analysis has also shown that studies from Asia are not reported in publications related to induction programs for effective new principals. Therefore, more studies need to be conducted in Asia in order to produce significant benefits to improve the principal's professionalism.

In terms of year of publication, Figure 3 shows that most studies were reported only once a year throughout the review. However, in 2006, an increment was recorded whereby three studies were produced. Based on a research report by the National College for School Leadership (NCSL), the involvement of new principals in induction programs in England was

high at 85% (9,000 participants) of the entire intake (Newton, 2001). As such, the NCSL has proposed the implementation of an induction program for new principal, namely the Headteacher Induction Program (HIP), which was first introduced in September 2006 (Weindling, 2004). In addition, the enactment of the No Child Left Behind Act in 2005 and the Every Student Succeeds Act in 2015 has also increased the need for effective leadership in schools, especially in the development of new principals in terms of academics and accountability (Dotres, 2020). In line with today's needs, the professional leadership of new principals must be developed and strengthened by identifying the key components of an effective induction program.

Various forms of induction programs have been developed around the world to meet the needs of effective principal leadership and subsequently improve student achievement (Clifford et al., 2016). The diversity of these key features requires research and consideration in several aspects including program organizers, training providers, administrative procedures, and reporting processes (Bush, 2018). For example, (Weindling, 2004) analyzed information for 18 induction programs that have varying details and concluded that there are five main components of an induction program, namely program structure, content, process, mentoring, and evaluation. In this study, based on the analysis of data obtained to answer the second question, there are three main themes or components identified in induction programs for effective new principals, namely the program structure, content, and process, as shown in Figure 4.
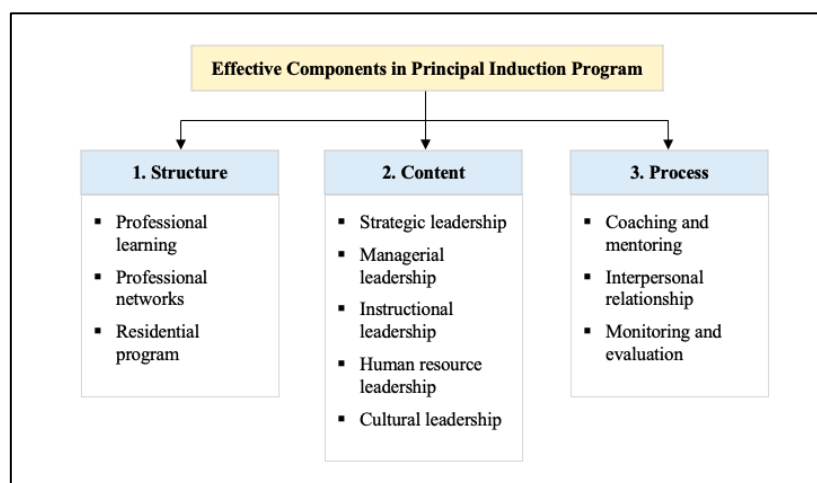

Figure 4 Effective components in new principal induction program

Firstly, the program structure includes the involvement of principals in professional learning and the development of professional networks through residential programs. As well as the implementation of activities such as workshops, courses, and seminars. The involvement of new principals in countries such as Austria and Hong Kong, but they are not mandatory in some places in Germany and Switzerland (Huber, 2006). In the implementation of residency programs, participants are required to remain at the designated school for a certain period to help them acquire the knowledge, skills, and competencies needed to manage the school. At the same time, the residential programs can also develop intellectual, emotional, and educational leadership, all of which are necessary to maximize their learning (Martin & Robertson, 2003). Based on the literature review, 10 out of 16 articles examined the aspects of professional learning in induction programs for new principals. This shows that

such elements are very important in ensuring the effectiveness of the induction program as a whole.

Aspects of professional network development are also studied in three articles through several learning approaches used in induction programs such as case studies for problem-solving, individual and group reflection sessions, and concept development through courses, workshops, and seminars. In this regard, professional networks exist among participants during activities that require them to collaborate and build networks with superiors, other new principals, and stakeholders (Darling-Hammond et al., 2007). This is one of the supporting strategies to enhance the professional learning of new principals, especially in the early stages of their service (Earley & Jones, 2010). Furthermore, this can also improve their professional identity as a leader (Browne-Ferrigno & Fusarelli, 2005).

Secondly, the content component denotes the curriculum developed in induction programs according to the standards set in a country (Weindling, 2004). In the context of induction programs, the designed curriculum should be able to develop and complement what was learned during the preparatory program, which includes matters related to vision development, school planning, and resource management (NYCLA, 2019). In this study, the analysis found five sub-themes in the content component, namely strategic leadership, managerial leadership, instructional leadership, human resource leadership, and cultural leadership. In general, these five aspects are competencies required by leaders in leading schools in the 21st century (NCSBE, 2013). The aspects also entail critical leadership functions that leaders in all types of schools must perform in order to drive their schools toward achieving organizational goals (Portin et al., 2003). Specifically, managerial leadership aspects are frequently discussed in the articles reviewed, followed by instructional leadership and strategic leadership.

Management leadership is very important for principals to manage efficiently and effectively, especially in terms of fiscal responsibilities, personnel, and problem-solving (Wenno, 2017). As organizational managers, principals must have the right strategy to empower education by providing collaboration and opportunities for teachers to improve their profession as well as encouraging the involvement of all teachers in various activities that support school programs (Yukl, 2002). In addition, management leaders also need to provide a positive learning environment by ensuring that classrooms are equipped with an adequate supply of teaching materials (Davis, 2003). As such, they should be responsible for monitoring the school budget and involve all teachers in making budget decisions in order to meet the needs of 21st century learning in every classroom (NCSBE, 2013).

Instructional leadership has the second highest frequency in the content component of an effective induction program. The study found that instructional leadership has an impact on teaching and subsequently student learning by creating conditions that allow effective teaching to occur (Heck & Hallinger, 2014). Therefore, principals also need to be strategic in the implementation of practices that encourage teachers to improve and increase their teaching and learning capacity (Leiva et al., 2017). In line with new principals' challenges to be more comprehensive and contextual, strategic leadership is the process of providing a clear direction for their school. The process takes into account various contexts, including implementation in the past, present, and future, as well as readiness in several important aspects such as physical, financial, and human resources (Eacott, 2006). In this regard, new principals need to master those skills, especially during the induction period through guidance from trained mentors to ensure that strategic planning is carried out toward organizational improvement.

Finally, the last component of an effective induction program is the process, which consists of three aspects, namely coaching and mentoring, interpersonal relationships, and monitoring and evaluation. Coaching and mentoring recorded the highest frequency in articles compared to the other two aspects of the process component. In line with the viewpoint of (Daresh, 2004), mentoring is a key element in the induction process for new principals. Coaching and mentoring in induction programs provide the professional, emotional, and communication support needed by new principals, which makes them more proactive and effective (Tekir, 2021). Specifically, the outcomes of mentoring in leadership include knowledge and skill growth, instructional guidance, and the reflective practice of new principals (Warren & Kelsen, 2013). However, selecting the right mentor is very important to create a positive mentoring relationship (Daresh, 2004). Mentors must not only be successful leaders, but they must also be dedicated in terms of time and expertise and have high interpersonal skills (Levine, 2021).

Interpersonal skills denote a leader's ability to relate well with staff, students, parents, communities, and stakeholders in order to promote teamwork as well as the ability to carry out tasks successfully (Oduro, 2003). In this regard, principals must be able to establish interpersonal relationships at all levels, build relationships based on trust, help teachers develop, and create a challenging learning climate (Spillane & Lee, 2014). Subsequently, the third aspect, which is monitoring and evaluation in induction programs, is important to identify weaknesses and deficiencies in various aspects for improvement. The most important aspect of school support is the collaboration between facilitators and leaders to assess the needs and strengths of principals in future programs (Martin & Robertson, 2003). Therefore, through this method, the ability of new principals can be monitored and evaluated progressively for the purpose of portfolio development and ultimately the achievement of goals.

Conclusion

This systematic literature review has successfully identified the key components of effective new principal induction programs by country and year of publication. In total, six countries were involved in publishing articles related to induction programs for effective new principals worldwide starting from 2000 until 2022. Evidently, the countries that published the most articles in order are the United States, the United Kingdom, New Zealand, South Africa, Australia, and Chile. Meanwhile, these studies were mostly published in 2006 and 2017 when induction programs began to be actively implemented, especially in the United States and the United Kingdom. In essence, there are three main components, namely program structure, content, and process, as well as 11 important aspects of an effective induction program. The aspects of the program structure component include professional learning, professional network, and residential programs, while the content component includes strategic leadership, management leadership, instructional leadership, human resource leadership, and cultural leadership. Finally, the process component comprises aspects such as coaching and mentoring, interpersonal relationships, and monitoring and evaluation.

Of the three components, the content component has the highest frequency, followed by the process component and the program structure. This shows that the professional learning of new principal plays a very important role specifically in strategic leadership, management leadership, instructional leadership, human resource leadership, and cultural leadership, especially in the early stages of service. Therefore, the content or curriculum of induction programs must be designed in detail according to the current needs and standards

set in each country in order to achieve optimal goals. Besides, in terms of professional development, induction programs effectively provide structured support to new principals in improving their knowledge and leadership skills through coaching and mentoring by experienced mentors (Darling-Hammond et al., 2007). A structured support system helps new principals deal with the challenges faced during their first year in the office whilst developing professional leaders for school improvement. In this regard, a detailed study regarding the needs of new principals in terms of leadership and guidance must be carried out to identify factors that can maximize the effectiveness of a principal and the development of precise induction process.

References

Acton, K. S. (2021). School leaders as change agents: Do principals have the tools they need?. Management in Education, 35(1), 43-51. https://doi/abs/10.1177/0892020620927415

Aiken, J. A. (2002). The socialization of new principals: Another perspective on principal retention. Education Leadership Review, 3(1), 32-40.

Assan, T. E. B., & Lumadi, M. W. (2013). Effectiveness of the induction programme for school principals in the North West Province. Anthropologist, 15(1), 79-87. https://doi.org/10.1080/09720073.2013.11891294.

Boren, D., Hallam, P., Ray, N., Gill, C., & Kuanchen, L. (2017). Examining effective principal professional development through a university-district sponsored principals academy. Educational Practice and Theory, 39(2), 87-106.

Browne-Ferrigno, T., & Fusarelli, B. C. (2005). The Kentucky principalship: Model of school leadership reconfigured by ISLLC Standards and reform policy implementation. Leadership and Policy in Schools, 4(2), 127-156. https://doi.org/10.1080/15700760590965587.

Bush, T. (2018). Preparation and induction for school principals: Global perspectives. Management in Education, 32(2), 66-71.

Bush, T., & Oduro, G. K. T. (2006). New principals in Africa: Preparation, induction and practice. Journal of Educational Administration, 44(4), 359-375. https://doi.org/10.1108/ 09578230610676587.

Clifford, M., Lasrsen, E., Lemke, M., Chambers, D., & Swanlund, A. (2016). Developing leaders: The importance-and the challenges-of evaluating principal preparation programs. George W. Bush Institute and American Institutes for Research.

Connolly, M., Dunning, G., & James, C. (2002). The development of the professional headship induction programme in Wales. International Journal of Educational Management, 16(7), 339-348. https://doi.org/10.1108/09513540210448103.

Daresh, J. C. (2004). Mentoring school leaders: Professional promise or predictable problems? Educational Administration Quarterly, 40, 495-517.

Darling-Hammond, L. (2010). Teaching for deeper learning: Developing a thinking pedagogy. In A. P. C. Avila, C. Hui, J. H. Lin, J. C. Peng Tam & J. C. Lim (Eds.), Rethinking educational paradigms: Moving from good to great. CJ Koh Professorial Lecture Series No. 5 (pp. 13-18). Singapore: Office of Education Research, National Institute of Education.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M., & Cohen, C. (2007). Preparing school leaders for a changing world: Lessons from exemplary leadership development programs. Stanford University, Stanford Educational Leadership Institute.

Davis, J. R. (2003). Learning to lead: A handbook for postsecondary administrators. American Council on Education and Praeger.

Digwamaje, O. B., & Assan, T. B. (2012). Nature and characteristics of the induction programme for primary school principals in the North West Province, South Africa. Anthropologist, 14(4), 269-277. https://doi.org/10.1080/09720073.2012.11891248.

Dotres, J. L. (2020). Effective elements of new principal induction programs in large urban school districts. [Doctoral dissertation, St. Thomas University].

Eacott, S. (2006). Strategy: An educational leadership imperative. Perspectives on Educational, 16(6), 1-2.

Earley, P., & Jones, J. (2010). Accelerated leadership development: Fast tracking school leaders. Institute of Education Publications.

Elsevier. (2020). Scopus content coverage guide. https://www.elsevier.com/__data/assets/pdf _file/0007/69451/Scopus_ContentCoverage_Guide_WEB.pdf.

Ford, T. G., Lavigne, A. L., Fiegener, A. M., & Si, S. (2020). Understanding district support for leader development and success in the accountability era: A review of the literature using social-cognitive theories of motivation. Review of Educational Research, 90(2), 264-307. https://doi.org/10.3102/0034654319899723.

Freeman, C., O'Malley, K., & Eveleigh, F. (2014). Australian teachers and the learning environment: An analysis of teacher response to TALIS 2013. Australian Council for Educational Research.

Galdames, S., Montecinos, C., Campos, F., Ahumada, L., & Leiva, M. V. (2018). Novice principals in Chile mobilizing change for the first time: Challenges and opportunities associated with a school's readiness for change. Educational Management Administration & Leadership, 46(2), 318-338. https://doi.org/10.1177/1741143217707520.

Ghimire, T. R. (2019). Preparing new principals in developing countries: Selection and induction. Sotang, Yearly Peer Reviewed Journal, 1(1), 86-92. https://doi.org/10.3126/sotang. v1i1.45746.

Grissom, J. A., & Harrington, J. R. (2010). Investing in administrator efficacy: An examination of professional development as a tool for enhancing principal effectiveness. American Journal of Education, 116(4), 583-612.

Hanover Research. (2015). Teacher and administrator induction programs: Prepared for California County Superintendents Educational Services Association. Author. https://www.slocoe.org/wp-content/uploads/2015/11/Teacher-and-Administrator-Induction-Programs-CCSESA.pdf.

Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. New York, NY: Teachers College Press.

Heck, R. H., & Hallinger, P. (2014). Modeling the longitudinal effects of school leadership on teaching and learning. Journal of Educational Administration, 52(5), 653-681. https://doi.org/10.1108/JEA-08-2013-0097.

Herman, R, Gates, S. M., Arifkhanova, A., Barrett, M., Bega, A., Chavez-Herrerias, E. R., Han, E., Harris, M. A., Migacheva, K., Ross, R., Leschitz, J.T. and Wrabel, S.L. (2003). School leadership interventions under the Every Student Succeeds Act: Evidence review: Updated and expanded. RAND Corporation.

Hermann, K. R. (2016). The principal's role; Distributed leadership. [Doctoral dissertation, Old Dominion University]. Educational Foundations & Leadership Theses and Dissertations.

Hertting, M. (2008). Are we supporting new principals? American School Board Journal, 195(6), 36-37.

Holligan, C., Menter, I., Hutchings, M., & Walker, M. (2006). Becoming a head teacher: The perspectives of new head teachers in twenty-first-century England. Journal of In-Service Education, 32(1), 103-122. https://doi.org/10.1080/13674580500479927.

Huber, S. G. (2006). School leader development: Current trends from a global perspective. Swiss Journal of Educational Research, 28(S), 37-56. https://doi.org/10.24452/sjer.28.S.4756.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2005). The adult learner (6th ed.). Routledge.

Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. Review of Educational Research, 88(4), 547-588.

Leiva, M. V., Montecinos, C., Ahumada, L., Campos, F., & Guerra, S. (2017). Novice principals' instructional management practices in high poverty, low performing schools in Chile. Procedia - Social and Behavioral Sciences, 237, 3-9. https://doi.org/10.1016/j.sbspro.2017.02.003.

Levine, J. K. (2021). Effective support for new principals: Administrator perspectives. [Doctoral dissertation, Carson-Newman University].

Lochmiller, C. R. (2014). What would it cost to coach every new principal? An estimate using statewide personnel data. Education Policy Analysis Archives, 22(55). http://dx.doi.org/10.14507/epaa.v22n55.2014.

Lochmiller, C., & Mancinelli, J. (2019). Principal's instructional leadership under statewide teacher evaluation reform. International Journal of Educational Management, 33(4), 629-643. https://doi.org/10.1108/IJEM-06-2017-0151.

Lovely, S. (2004). Staffing the principalship: Finding, coaching, and mentoring school leaders. Association for Supervision and Curriculum Division (ASCD).

Mangas-Vega, A., Dantas, T., Merchán Sánchez-Jara, J., & Gómez-Díaz, R. (2018). Systematic literature reviews in social sciences and humanities. A case study. Journal of Information Technology Research, 11 (1), 1-17. https://doi.org/10.4018/JITR.2018010101.

Mariano, D. C., Leite, C., Santos, L. H., Rocha, R. E., & de Melo-Minardi, R. C. (2017). A guide to performing systematic literature reviews in bioinformatics. arXiv preprint arXiv:1707.05813.

Martín-Martín, A. (2018). Code to extract bibliographic data from Google Scholar (v1.0). Zenodo. https://doi.org/10.5281/zenodo.1481076.

Martin, J., & Robertson, J. M. (2003). The induction of first-time principals in New Zealand - A programme design. International Electronic Journal for Leadership in Learning, 7(21), 1-13. https://journals.library.ualberta.ca/iejll/index.php/iejll/article/view/411/73.

Meyer, F., Sinnema, C., & Patuawa, J. (2019). Novice principals setting goals for school improvement in New Zealand. School Leadership and Management, 39(2), 198-221. https://doi.org/10.1080/13632434.2018.1473358.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). The PRISMA group preferred reporting items for systematic reviews and metaanalyses: The PRISMA statement. PLoS Med, 6(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097.

Naidoo, P. (2019). Perceptions of teachers and school management teams of the leadership roles of public school principals. South African Journal of Education, 39(2), 1-14. http://dx.doi.org/10.15700/saje.v39n2a1534.

Neumerski, C., Grissom, J., Goldring, E., Rubin, M., Cannata, M., Schuermann, P., & Drake, T. (2018). Restructuring instructional leadership: How multiple-measure teacher

evaluation systems are redefining the role of the school principal. The Elementary School Journal, 119(2), 270-297. https://doi.org/10.1086/700597.

Newton, P. (2001). The headteachers' leadership and management programme (HEADLAMP) review. National College for School Leadership.

North Carolina State Board of Education (NCSBE). (2013). North Carolina Standards for School Executives. North Carolina Department of Public Instruction, State Board of Education. https://files.nc.gov/dpi/north_carolina_standards_for_school_executives_1.pdf.

NYC Leadership Academy. (2019). Giving new principals a strong start: What works in principal induction. Author. https://www.nycleadershipacademy.org/wp-content/uploads/2019/ 05/principal-induction-leadership-brief.pdf.

Oduro, G. K. T. (2003). Perspectives of Ghanaian head teachers on their role and professional development: The case of KEEA district primary school. [Doctoral thesis, University of Cambridge].

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. British Medical Journal, 372, n71. https://doi.org/10.1136/bmj.n71.

Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. Information & Management, 52(2), 183-199. https://doi.org/10.1016/j.im.2014.08.008.

Peterson, K. (2002). The professional development of principals: Innovations and opportunities. Educational Administration Quarterly, 38(2), 213. https://doi.org/10.1177/ 0013161X02382006.

Portin, B., Schneider, P., DeArmond, M., & Gundlach, L. 2003. Making sense of leading schools: A study of the school principalship. Center on Reinventing Public Education, University of Washington.

Pranckutė, R. (2021). Web of Science (WoS) and Scopus: The titans of bibliographic information in today's academic world. Publications, 9(1), 12. https://doi.org/10.3390/publications 9010012.

Robinson, V. M. J., Eddy, D., & Irving, E. (2006). Catering for diversity in a principal induction programme. School Leadership & Management, 26(2), 149-167. https://doi.org/10.1080/13634230600589691.

Silver, M., Lochmiller, C. R., Copland, M. A., & Tripps, A. M. (2009). Supporting new school leaders: Findings from a university-based leadership coaching program for new administrators. Mentoring and Tutoring: Partnership in Learning, 17(3), 215-232. https://doi.org/10.1080/13611260903050148.

Spillane, J. P., & Lee, L. C. (2014). Novice school principals' sense of ultimate responsibility: Problems of practice in transitioning to the principal's office. Educational Administration Quarterly, 50(3), 431-465. https://doi.org/10.1177/0013161X13505290.

Stahlschmidt, S., & Stephen, D. (2020). Comparison of Web of Science, Scopus and Dimensions databases: Report to Kompetenzzentrum Bibliometrie. Hannover: German Centre for Higher Education Research and Science Studies (DZHW).

Steinberg, M. P., & Yang, H. (2022). Does principal professional development improve schooling outcomes? Evidence from Pennsylvania's inspired leadership induction program. Journal of Research on Educational Effectiveness, 15(4), 799-847. https://doi.org/ 10.1080/19345747.2022.2052386.

Talley, V., & Henry, C. (2008). Mentoring: The courage to cultivate new leaders. American Association of Nurse Anesthesiology Journal, 76(5), 331-334.

Tekir, S. (2021). A study of early career principals' perceptions of their induction program. Turkish Online Journal of Qualitative Inquiry, 12, 377-404. https://dergipark.org.tr/en/pub/tojqi/issue/61506/869758.

Theodosiou, V., & Karagiorgi, Y. (2017). Primary school heads' professional socialization and leadership development in Cyprus. International Journal of Leadership in Education, 20(6), 661-681. https://doi.org/10.1080/13603124.2015.1073360.

Turnbull, B. J., Riley, D. L., & MacFarlane, J. R. (2013). Cultivating talent through a principal pipeline. Wallace Foundations.

Ulrick, A., & Bowers, A. (2013). What are the different types of principals across the United States: A latent class analysis of principal perception of leadership. Educational Administration Quarterly, 50(1), 96-134. https://doi.org/10.1177/0013161X13489019.

Wallace Foundation. (2013). The school principal as leader: Guiding schools to better teaching and learning. Wallace Foundation.

Wardlow, R. L. (2008). Induction and support of new principals. [Doctoral dissertation, University of California]. UC San Diego Electronic Theses and Dissertations.

Warren, S. R., & Kelsen, V. E. (2013). Leadership coaching: Building the capacity of urban principals in underperforming schools. Journal of Urban Learning, Teaching, and Research, 9, 18-31.

Watts, J. L. (2022). Supporting beginning principals to survive and thrive in the role: A systematic review of literature. School Leadership and Management. https://doi.org/10.1080/ 13632434.2022.2137726.

Weindling, D. (2004). Innovation in headteacher induction. National College for School Leadership. https://dera.ioe.ac.uk/5082/2/D5082New.pdf.

Weinstein, J., Cuellar, C., Hernandez, M., & Fernandez, M. (2016). Director por primera vez: Un estido sobre la experienca y socializacion de los directores noveles en establecimientos municipals en Chile. Revista Calidad en la Educaacion, 44(1), 12-45. http://dx.doi.org/10.4067/S0718-45652016000100002.

Wenno, I.H. Influence of principal managerial leadership and compensation towards physics teacher performance in senior high school in Baguala. International Education Studies, 2017, 10(1), 233-244. https://doi.org/10.5539/ies.v10n1p233.

Westberry, L., & Zhao, F. (2021). A Psychometric look at principal professional development. International Journal of Education Policy & Leadership, 17(7).

Wilmore, E. (2004). Principal induction. Corwin Press.

Yukl, G. A. (2002). Leadership in organizations (5th ed.). Prentice Hall.