



Experienced Physical Education Teachers Adapting to a New Curriculum: Perceived Facilitators and Inhibitors

*Adaptation des enseignants d'éducation physique à un
nouveau programme-cadre: Facilitateurs et inhibiteurs*

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Physical education (PE) teachers are expected to learn throughout their careers in order to effectively educate their students. However, researchers have stated that the methods used to ensure continuous learning amongst PE teachers are inadequate because they do not meet the needs of experienced teachers. The present study was motivated by the need to better understand the adaptation process for experienced PE teachers and, as such, the purpose was to understand how experienced PE teachers perceived the process of adapting to a new curriculum. Using a phenomenological approach, this study examined the facilitators and inhibitors that affected the adaptation process for experienced PE teachers during the 1999 Ontario curriculum change. Data were collected from ten experienced PE teachers from high-schools in Ottawa, Ontario. Though many factors were found to affect the adaptation process, the relative experience of these teachers appeared to mainly affect their confidence, which facilitated the adaptation process.

Les enseignants d'éducation physique devraient se perfectionner tout au long de leur carrière pour ainsi continuer à former efficacement leurs élèves. De nombreuses recherches révèlent que les méthodes utilisées pour assurer l'apprentissage continu des enseignants d'éducation physique sont inadéquates car elles ne répondent pas aux besoins des enseignants d'expérience. La présente étude a été entreprise dans le but de mieux comprendre le processus d'adaptation d'enseignants d'éducation physique d'expérience et, de ce fait, comment ces enseignants perçoivent le processus d'adaptation dans un contexte d'implantation d'un nouveau programme-cadre. Misant sur une approche phénoménologique, l'étude s'est penchée sur les facilitateurs et inhibiteurs ayant un effet sur le processus d'adaptation vécu par des enseignants d'éducation physique d'expérience ayant eu à utiliser la version modifiée du programme-cadre de l'Ontario en 1999. Les données ont été recueillies auprès d'enseignants d'éducation physique d'expérience travaillant dans des écoles secondaires

d'Ottawa, en Ontario. De nombreux facteurs influencent le processus d'adaptation. L'étude révèle également que l'expérience relative de ces enseignants semblait surtout influencer leur niveau de confiance, ce qui facilitait le processus d'adaptation.

Introduction

Physical education (PE) teachers are expected to learn continuously throughout their careers in order to effectively educate their students. Standards set by the Ontario College of Teachers (OCT) dictate that all teachers must “engage in professional learning appropriate to their interests, needs, perspectives and responsibilities” (2006, p. 4). This continuous learning is referred to as professional development (PD) and is put in place because initial teacher training cannot contain all of the knowledge that is needed throughout the career of a teacher (Knight, 2002). However, it has been stated that the methods used to ensure PD amongst PE teachers are inadequate in that they simply do not meet the needs of experienced teachers (Armour & Yelling, 2004; Borko, 2004). Furthermore, Armour (2006) indicates that “to date, the primary focus of both policy and research has been the relatively brief process of initial teacher training” (p. 203).

Because of these gaps in the literature, and the problems associated with PD programs (Armour, 2006), researchers have yet to discover what can specifically facilitate or inhibit an experienced teacher when adapting to a curriculum change. Consequently, when these changes occur, curriculum organizers are not aware of the factors that can facilitate or inhibit the change process and, as such, cannot tailor to the needs of experienced PE teachers. The purpose of this research was to address such gaps by investigating how experienced PE teachers adapt to curriculum change. In order to accomplish this, the current study examined the facilitators and inhibitors perceived by experienced PE teachers when implementing the revised PE curriculum in 1999, and the specific effect of experience on this adaptation process.

Research Context

The Ministry of Education in Ontario issued a document in 1996 entitled ‘Curriculum for Ontario Secondary Schools,’ indicating that “Curriculum Guidelines for Ontario secondary schools ha[d] not been re-written in almost a decade” (p. 1). However, no changes were made to the secondary school curriculum until 1999, and these changes were resisted because they “left teachers and school boards feeling considerable pressure without the necessary support” (Winter & McEachern, 2001, p. 685). Previous research has also shown that teacher resistance is a common occurrence during a time of educational change because “times of change are generally times of uncertainty for teachers and their usual response is to resist attempts to change and to hold on to existing practices” (Johns, 2003, p. 358). Fullan and Stiegelbauer (1991) attributed difficulties with educational change to insignificant procedures, inappropriate strategic planning, and a lack of consideration for the needs of the school or the working conditions of the practicing teachers. Furthermore, many attempts at implementing change did so “without either a careful assessment of its strengths and weaknesses, or of how or whether it can be integrated with what is already going on” (Fullan, 1993, p. 51). Often, as a result, teachers are unable to adapt to

change, and schools end up with an educational system which is fundamentally conservative (Fullan, 1993).

In 2006, the OCT issued revised guidelines for the Foundations of Professional Practice which “outline the principles of... ongoing learning for the teaching profession in Ontario” (2006, p. 3). These standards were based on the premise that teachers move through different career stages which will affect the way they learn, adapt and teach their classes. Specifically, the guidelines ensure that teachers of all levels of experience “engage in professional learning appropriate to their interests, needs, perspectives and responsibilities” (p. 4). Unfortunately, little attention is given to experienced teachers during these times of learning, and they are often given little support when attempting to change aspects of their curriculum (Hargreaves, 2005). The little research that has been conducted on experienced teachers suggests that these teachers find it more difficult to adapt to changes than their less-experienced counterparts (Howey & Corrigan, 1980). Hargreaves (2005) concluded that not all teachers have similar responses to change: “amongst the most important of these influences is teachers’ age, as well as their career status” (p. 967). It was the goal of the current research to unearth these responses in order to determine: how do experienced PE teachers adapt to curriculum change? And what factors can facilitate or inhibit this adaptation process?

Data in this study were collected in 2008 and asked participants to recollect their experiences from the most recent Ontario curriculum change in 1999 in hopes that the information could be used to inform the parties involved in the upcoming 2011 change. By answering the research questions of the current study, insight could be given to individuals in charge of implementing the new curriculum, as well as the teachers themselves, to lead to a smoother adaptation process.

Factors Influencing the Change Process

Two sources were used as underlying frameworks to guide the current study. The comprehensive framework for classroom and school improvement presented by Fullan, Bennett, and Rolheiser-Bennett (1990), which specifically positions ‘the teacher’ at the heart of the change process, was used as a guide to understand what can influence a teacher when adapting to change. This framework identified reflective practices, collaboration, teacher research, and having confidence in one’s technical repertoire as factors that can affect the change process for “anybody at the school level who is a professional educator” (p. 15). McKernan (1996) supported the importance of a teacher engaging in research. He indicated that when teachers take time to investigate different areas of resources it often improves their teaching. Veenman’s (1984) paper further supported factors outlined by Fullan et al.(1990), as he indicated that beginning teachers were not as confident as experienced teachers in their technical repertoire and that this led to problems in their disciplinary practices, classroom management, and class control.

In addition to the framework presented by Fullan et al. (1990), research by Bechtel and O’Sullivan (2007) specifically investigated factors that affected secondary PE teachers who experienced changes in their programs. The two factors that facilitated adaptation were the beliefs of the teachers, as well as the collaboration and support they received. Conversely, the teachers identified that

district policies and the marginalization of PE inhibited the adaptation process. They also concluded that “beginning teachers often have different concerns than experienced teachers, so the stage of one’s career might have an impact on the teacher change process” (p. 233). Factors affecting the change process identified in Bechtel and O’Sullivan’s (2007) study, along with the comprehensive framework presented by Fullen et al. were used to guide the investigation of the possible facilitators and inhibitors of the adaptation process for the experienced PE teachers in the current study. From these two sources, each factor appears to have both a facilitative and inhibitive affect on teacher adapting to change, depending on the presence or absence of each one. The following sections will more thoroughly present the factors identified in Bechtel and O’Sullivan’s study as well as the factors identified in the framework by Fullen et al.(1990).

Beliefs

Previous research has stressed the importance of teacher beliefs when adapting to a change (Fullan, 2003; Ha, Lee, Chan, & Sum, 2004; Tsangaridou, 2006; Wirszyla, 2002). Specifically, change was more effectively implemented when PE teachers believed that the changes would enhance the learning of their students (Bechtel & O’Sullivan, 2007; Ha et al., 2004; Richardson & Placier, 2001). As Fullan indicated, change would not be possible unless teachers “believe they are doing something worthwhile” (p. 34). The issue is that very little “consideration is given to the teachers’ pre-existing beliefs and their perceptions of the need to change” (Ha et al., 2004, p. 423).

Collaboration and Support

Bechtel and O’Sullivan (2007) indicated that the collaboration and support teachers received from fellow teachers, principals and students facilitated their adaptation to changes. Further literature described similar findings to the Bechtel and O’Sullivan study, stressing the importance of collaboration and being supported by colleagues during a change (Fullan, 2003; Johns, Ha & MacFarlane, 2001; Johns, 2003). Fullan specified that when teachers experienced change as a group, the collegiality that occurred allowed teachers to adapt more effectively. Other research has indicated the importance of a collaborative environment during PD programs (Armour & Yelling, 2007; Fiszer, 2004; Guskey, 2002; WestEd, 2000). These studies indicated that PD programs were enhanced when they “shifted from isolated learning and the occasional workshop to focused, ongoing organizational learning built on collaborative reflection and joint action” (WestEd, 2000, p. 11).

Planning

Briscoe and Peters (1998) conducted a study that investigated possible reasons why collaborative work amongst teachers facilitated the change process. Their research indicated that collaboration allows for teachers to share ideas, discuss their practices, and it gives them an “opportunity to plan together” (p. 57). A participant from their study discussed that planning allowed her to get “everything out and get [their] ideas together” (p. 58) and that this facilitated her adapting to change. Furthermore, Hall and Hord (1987) indicated that planning was useful for facilitating change in schools because it allowed teachers “to

handle unanticipated occurrences and to utilize more effectively his or her limited time and resources” (p. 9).

District Policies and Administration

Bechtel and O’Sullivan (2007) indicated that “the lack of professional development for physical education teachers in the district” (p. 230) and “the marginalization of physical education by the school district” (p. 231) were key barriers to the teacher change process. Additional literature has also indicated how an unsupportive district can affect the change process for PE teachers (Armour & Yelling, 2007; Dwyer et al., 2003; Johns, 2003). Dwyer et al. (2003) showed that school districts often gave PE a “low priority in the school system” which often tempted teachers to return to more familiar programs instead of adapting to the incoming change. It appeared however, that “in situations where the school board and the district are *actively* working together, substantiated improvements can be achieved, compared to conflictful or uninvolved boards” (Fullan & Stiegelbauer, 1991, p. 75).

Professional development. Research has suggested that in order to help PE teachers overcome the barriers of curriculum change; school districts should provide these educators with continuing and relevant PD (Armour & Yelling, 2004). Armour and Yelling (2007) defined PD as “all types of professional learning undertaken by teachers beyond the initial point of training” (p. 178). PD programs allow experienced teachers to be continuous learners throughout their careers (Fullan, 2003; Knight, 2002) and have the potential to substantially improve PE for teachers and students (Armour & Yelling, 2007). The problem however, was that these PD programs “both within PE, and more generally, simply did not meet their needs as experienced teachers” (Armour & Yelling, 2004, p. 96). Because of this, the experienced teachers were unable to effectively adapt to, and subsequently, instruct, proposed curriculum changes.

Methodology

A phenomenological methodology was employed in order to capture the subjective experiences of the participants in the current study (Crotty, 2003). It was assumed that the participants possessed the knowledge that the researchers set to uncover; and it was the goal of the current researchers to reveal these subjective experiences. Crotty (2003) suggested that in order to get ample meaning from a participant’s experience, it is best if the researcher ‘brackets’ his or her presumptions of the phenomena as it is being described during an interview. The process of bracketing was utilized by the primary researcher during the investigation of the current study. Following the interview with each participant, the primary researcher would reflect on the data that emerged by writing in a journal. These journal entries were kept and read continuously throughout the data collection process in order to ensure that any biases were known and apparent, and could be put aside during the bracketed investigation. This process was successful in limiting biases, exemplified by the discoveries of factors that were not included in the interview guide. For example, the researcher had no prior thought that the personality of a teacher would have an impact on the adaptation process, yet all teachers indicated this as an important factor.

Ten secondary school PE teachers from the Ottawa school boards participated in this study. All schools are, as per their individual school profile,

ethno-culturally diverse, and represent an urban school in the City of Ottawa. The number of students in each school ranged from 550 to 1300, with a mean of 1071 students. Armour and Yelling (2007) indicated that a teacher becomes experienced after five years of teaching. All participants had at least five years of experience in 1999 when the curriculum change was implemented, with an average experience of 11.2 years at this time.

One semi-structured, audio-recorded interview per participant was used as the method of data collection. An interview guide, consisting of two sections, was used to ensure participants were receiving the same base of questions. In the first section, teachers were asked broad questions to describe what they perceived to have affected their adaptation to the new curriculum; for example 'What may have helped you adapt to the curriculum change?.' In the second section, the participants were probed to discuss factors that have been previously stated to affect the change process, as shown by Bechtel and O'Sullivan (2007) and Fullan et al. (1990); for example, 'Did you receive any support from your colleagues during the change, and what effect did this have on your adaptation?'

Data Analysis

All audio-recordings were transcribed verbatim upon completion of each interview. Transcriptions were e-mailed to participants to allow for member checking (Rubin & Rubin, 2005). The transcriptions were analyzed using NVivo7 software and an inter-analysis process was used to discover emerging themes from the data. Emerged themes were organized by the first author into separate categories concurrent with the various factors presented by Bechtel and O'Sullivan (2007) and Fullan et al. (1990). Emerging factors that did not fit into any of the categories presented by these two sources led to the creation of new categories, such as Personality. After this initial organization, the categories, and the data within the categories, were reviewed and discussed between the first and second author to provide a second-look at the information. A pictorial organization of the common factors was created and sent to all teachers for a second round of member checking.

Results and Discussion

Factors that were perceived to facilitate or inhibit the adaptation process for the participants were categorized into four groups: the Personal Level, School Level, School Board Level, and the Upper Level. These four groups led to the creation of a Pyramid Model, which is a representation of the perceptions of the participants (Figure 1). Outside support was also perceived to affect the adaptation process, and was put outside the pyramid because it was something that affected teachers from outside of the school realm. Furthermore, experience was only perceived to affect the confidence of the participants, and, as such, is placed outside the model linked with teacher confidence. The puzzle-piece design is an attempt to illustrate the interconnectedness between each factor and level. Presented in the following sections are results, implications and discussions of each factor and level.

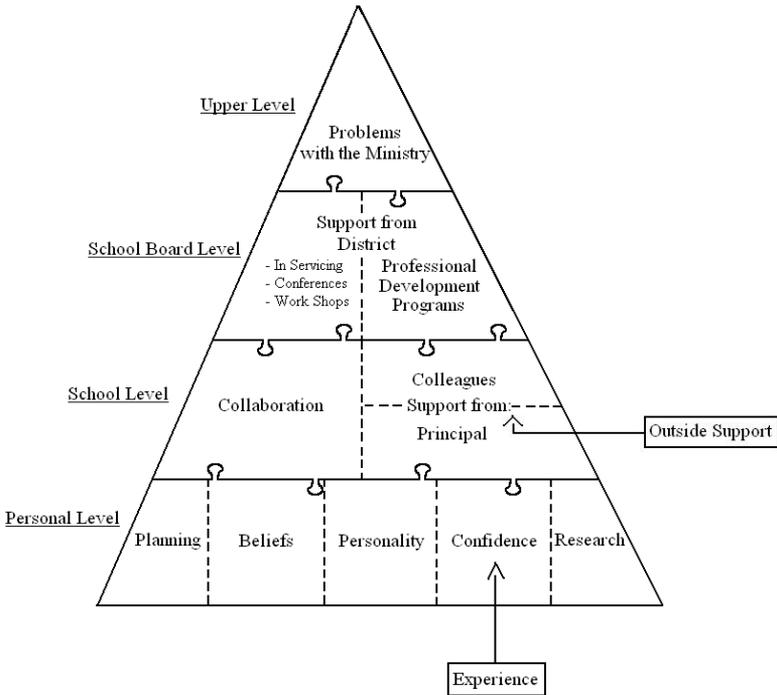


Figure 1. The Pyramid Model: A Pictorial Representation of the Facilitators and Inhibitors for Experienced PE Teachers when Adapting to Curriculum Change.

Personal Level

The following five topics to be discussed encompass what was found to affect the adaptation process for the participants at the personal level. These factors represent characteristics of the individual teacher as well as factors that they can directly control.

Confidence. Confidence was defined as a teacher being sure of his or her ability to effectively teach PE and, as such, implement the aspects of the new curriculum. All ten PE teachers reported that they were confident in their teaching abilities in PE as the new curriculum was implemented and that this confidence facilitated them in adapting to the changes. This result supports the importance of Fullan et al.'s (1990) framework, where the authors indicated that an increase in instructional certainty, or confidence, is one component for ensuring change. These results also support the research conducted by Faucette (1987) who indicated that "teachers who believed in their own competence—who possessed a sense of efficacy—were more likely to use and maintain an innovation" (p. 439). Interestingly, the participants indicated that the high level of confidence that was perceived was a result of their experience in teaching PE.

Experience. All participants in this study perceived that they were experienced during the time of the investigated curriculum change. Though multiple factors were indicated by the participants to have affected the adaptation

process, these teachers perceived that their relative experience only had an influence on their confidence during this change. It appears that experienced PE teachers exhibit more confidence, which may be the one major difference that separates their adaptation process from teachers of less experience.

Hargreaves (2005) and Howey and Corrigan (1980) discussed that experienced teachers have more difficulty adapting to change because of factors of development, and decreases in optimism, energy and desire to change. The participants in the current study bring new light to these prior findings, revealing that experienced PE teachers may not find it as difficult to adapt to curriculum change because the process is facilitated by their confidence in their teaching. When asked what affect her experience had on her adaptation process, one teacher indicated:

I just think that there is more of a confidence level when you have more experience. You're not as worried about things, you'll do your best and you're okay with that. Whereas I think when you are less-experienced, you tend to put pressure on yourself.

While this perception was mirrored across all participants, some teachers indicated that though their experience increased their confidence which facilitated the adaptation process, beginning teachers have facilitators not found in experienced teachers. One aspect that was discussed by the participants was that the knowledge that beginning teachers recently acquired in their degrees and teacher preparation classes is so fresh, they are able to implement any change. Furthermore, as Hargreaves (2005) indicated, beginning teachers “deal with change every single day and they thrive on it” (p. 972).

It appears from the data collected and from the literature in this area that experienced and beginning teachers both have facilitative factors when adapting to change. However, experienced PE teachers have acquired a certain level of confidence that beginning teachers have yet to acquire. Conversely, beginning PE teachers may have attributes that their experienced counterparts do not possess. Therefore, it is not that beginning or experienced PE teachers are more adaptive, but rather that the processes involved in their adaptation may be different.

Personality. Personality in the current study was defined as traits of the participants that facilitated or inhibited the individual teachers to adapt. Though teachers were not specifically asked about how their personality influenced the adaptation process, all participants provided unsolicited information that indicated that their personality acted as a facilitator to their adaptation process. Furthermore, the participants perceived that their individual personality was more of a factor than their experience in determining adaptability to a curriculum change. As one teacher indicated:

For me, I think it depends on the personality. There are a lot of experienced teachers that don't want to change. They get comfortable; they get into a routine, so they don't want to change. Other experienced teachers are always willing to change, always willing to grow. So it's not always the experience, it's the personality of the teacher that is important. You can teach old dogs new tricks. And there are old dogs you can't teach new tricks to.

Few studies have researched the effects of a teacher's personality on their adaptability to a curriculum change; however, Richardson (1990) indicated that

often times change is not fully embraced because some teachers are simply unwilling to change.

Planning. Planning was defined as teachers performing pedagogical tasks, such as preparing lessons and units, to help with the future implementation of the curriculum. Most, but not all, participants in the current study indicated that they had planned for the change in the upcoming curriculum.

There were a lot of things that I had already been doing, and we already had in place, and it wasn't that hard of a change. I think, because, we knew where the curriculum was going to be going ... we had already made the steps to lead in that direction, so when we finally got the new curriculum, we had pretty well started the process prior to that.

All teachers that indicated that they did some form of planning described that this preparation facilitated them to adapt to the curriculum change. Similar to the other topics already discussed thus far in these results, there has been little research conducted on the effect of planning on the adaptation process for teachers. Though these confirm Hall and Hord's (1987) notion that planning can be useful to facilitate change in schools, more research is needed to create an accurate depiction of the specific role of teacher planning on the adaptation process.

Beliefs. Beliefs were defined as a participant having positive or negative views about the curriculum and/or agreed or disagreed that the curriculum would instill the appropriate knowledge into their students. Most of the participants had positive beliefs towards the new curriculum, and few had negative beliefs or a mix of positive and negative beliefs. Participants had positive beliefs about three aspects of the new curriculum: a decrease in the emphasis on skill, an increase in an emphasis on lifelong learning in physical activity, and finally a global positive attitude towards the new curriculum. All participants that had positive beliefs towards any aspect of the new curriculum indicated that these beliefs facilitated them to adapt to the new curriculum.

The perceptions of the participants confirm the findings of many studies (Bechtel & O'Sullivan, 2007; Fullan, 2003; Ha et al., 2004; Tsangaridou, 2006; Wirszyla, 2002). These studies indicated that when teachers had beliefs that were congruent with an incoming change, it facilitated their adaptation process. There appears to be many aspects of a curriculum that a teacher can have positive beliefs towards that will facilitate adaptation. As seen with the current participants, the teachers had positive beliefs about different aspects of the new curriculum. Whether it is the increase of lifelong learning or a decrease in skill evaluation, believing that the incoming curriculum will positively affect one's teaching and students will likely facilitate adaptation.

Although most participants had positive beliefs, some participants did not believe the new curriculum would instill appropriate knowledge. One teacher indicated that he did not believe that the grade ten health curriculum was satisfactory for his students. When the researcher asked him what affect this had on him adapting to the change in curriculum, he responded: "But I still do it, right? ... But if you don't believe in something ... then, you're not going to, certainly do it as well as it could be done". These teachers perceived that these negative beliefs inhibited their adaptation process. This supports the finding by Bechtel and O'Sullivan (2007), where it was shown that the PE teacher whose

beliefs were not as strong as the other participants adapted less successfully to change.

Research. Research in the current study was defined as teachers taking time to search for new documents or materials to help implement the new curriculum. These documents came from newspapers, the internet, academic journals, books, text books and novels. Most participants specified that they engaged in some form of searching for new materials and they indicated that this facilitated them when adapting to the new curriculum. Most teachers stated that the reason this research facilitated them to adapt was because it helped them learn about topics in which they were less knowledgeable. This finding supports the work of Fullan et al.'s (1990) framework, where the authors illustrated the importance of a teacher performing research as a key component in the change process within schools.

School Level

Participants discussed that collaborating with and being supported by their colleagues and principals affected their adaptation to the curriculum. The following factors were perceived to affect the adaptation process for experienced PE teachers at the school level.

Collaboration. Collaboration was defined as two or more teachers meeting to discuss the new curriculum to work on aspects of the change. The participants indicated that they collaborated with teachers from their own school, and teachers from different schools. The specific goals this collaboration were said to have been to 'share ideas,' 'create resources,' 'run workshops for other teachers,' and to 'plan for the changes.' All teachers indicated that they collaborated with other teachers during the time of the curriculum change, but it was unclear if this acted as a facilitator or inhibitor for two of the participants. All other participants identified that collaborating with other teachers facilitated their adaptation process.

These findings further support the importance of Fullan et al.'s (1990) conceptual framework, where the authors illustrated the involvement of collaboration as a component to ensure change in schools because it allows for ideas to be shared. Furthermore, the perceived importance of collaboration on the adaptation process from the current participants confirm the results of previous studies (Armour & Yelling, 2007; Fiszer, 2004; Fullan, 2003; Johns, 2003, WestEd, 2002; Wirszyła, 2002). All of these studies suggest that collaborative efforts amongst teachers help facilitate the process of adaptation to a change, but not all schools and school board districts allow the time and resources for collaboration (Fullan, 2003).

Colleague Support. Teachers reported that they received support from a variety of individuals, organizations and bodies. One specific factor that was perceived to have influenced the adaptation process for the participants was the support they received from their colleagues.

It is difficult to fully grasp the effect of support on affecting the adaptation process for the participants in the current study. All teachers that reported receiving support from their colleagues indicated that this facilitated their adaptation process. However, though all participants realized the importance of support when adapting to a new curriculum, some indicated that they did not need, and thus did not receive support from their colleagues. Rather, these

participants indicated that they were *providing* the support to other teachers during the change. This might be explained by the selection criteria, in that all participants were experienced PE teachers. As such, the need for colleague support may be less necessary for an experienced teacher; nevertheless, when supported by colleagues, a facilitative affect was perceived by experienced PE teachers adapting to a curriculum change.

These findings support the results of many studies which stress the importance of a supportive network of colleagues when adapting to a change (Bechtel & O'Sullivan, 2007; Fullan 2003; Johns, 2003; Wirszyla, 2002). Specifically, Bechtel and O'Sullivan's investigation revealed that the support PE teachers received was a major factor in the adaptation to change.

Principal Support. Principal support was defined as receiving some form of aid or guidance from the school principal to help a teacher through the change. All participants indicated that they believed that their principal was supportive during the change and that this facilitated their adaptation to the curriculum. However, the perception was that the principals were not 'actively' supportive, in that they were always open to help the teachers, but not necessarily offering their constant support at all times. Nevertheless, this inactive support was perceived to facilitate adaptation.

The duties of a principal when implementing a curriculum change were outlined by the OCT's (2006) Professional Learning Framework. The OCT specified that principals should be included in the curriculum change process to encourage growth for teachers. This duty was confirmed to affect the teachers in the current study, as discussed in previous research (Bechtel & O'Sullivan, 2007; Fullan & Stiegelbauer, 1991; Wirszyla, 2002). Similar to the results of the current study, Bechtel and O'Sullivan indicated that though it is not necessary for principals to support their colleagues during a change, their support will undoubtedly facilitate the process.

School Board Level

Factors initiated at the school board were found to affect the adaptability of teachers. The school board district affected the adaptation process of teachers in the current study by offering resources, workshops, as well as providing them with PD programs to facilitate adaptation. These will be discussed in the following subheadings.

District Support. District support was defined as participants receiving aid or guidance from the school board to help a teacher through the change. Teachers who specified that they received adequate support from their district reported that this facilitated them to adapt to the change. Examples of how a district offered support were providing teachers with conferences, workshops, or in-servicing to attend. Some participants, however, reported inadequate support from the district, which acted as an inhibitor to the adaptation process to the new curriculum.

These results support the findings of other studies stressing the importance of a supportive school board during a change (Bechtel & O'Sullivan, 2007; Dwyer et al., 2003; Johns, 2003). Bechtel and O'Sullivan indicated that an unsupportive district that did not provide workshops for PE teachers inhibited the change process. The researchers in that study identified that the increased marginalization of PE is one reason for this lack of support from the district.

Professional Development. A specific form of support that school boards can offer teachers is PD programs. Most participants reported that they received adequate PD during the change which facilitated their adaptation process. One teacher, however, perceived that the PD provided was insufficient to meet her needs during the change, and this inhibited her adaptation.

The results of the current study support the importance of effective PD programs during a curriculum change for PE teachers (Bechtel & O'Sullivan, 2007; Knight, 2002; Fullan, 2003). Teachers in Bechtel and O'Sullivan's study felt that their district was providing them with insufficient PD, which inhibited adaptation. Participants in other studies have also reported the inadequacy of PD on PE teachers (Armour & Yelling, 2007; Borko, 2004). Previous research, coupled with the results from the current study, support the conclusion that effective PD is an integral part of the adaptation process for experienced PE teachers.

Upper Level

The Ministry of Education in Ontario issues the curriculum for the province as well as provides funding to school boards for resources (Ministry of Education, 2008). The Upper Level in the current study consists of factors from the ministry that were reported to affect adaptation.

Problems with the Ministry. Problems with the ministry were defined as disagreements with the procedures, policies, and facets of the overarching ministry. No teachers perceived that the ministry facilitated adaptation. All but one teacher perceived that problems with the ministry inhibited their adaptation to the curriculum.

Three problems were perceived by the participants: a lack of resources, a lack of direction, and a general disagreement with the procedures during the change. Firstly, teachers indicated that they felt 'short-changed' during the process as PE was never given a textbook, whereas 'more important' subjects were provided with one. Furthermore, participants perceived that the ministry did not provide them with enough direction to make the changes in the curriculum. These participants perceived that the new curriculum was given to them without any guidance as to what they were supposed to be doing. These results support Dwyer et al.'s (2003) study whose participants had difficulties implementing a program because the Ontario curriculum document was unclear about teacher and classroom expectations.

Outside Support. Outside support was defined as teachers receiving support from organizations other than the school board, and the Ministry of Education. One of the organizations identified as influencing adaptation was the Ontario Physical and Health Education Association (OPHEA). OPHEA is a non-profit organization that supports the development of lifelong learning and physical activity through PE (OPHEA, 2009). During the time of the curriculum change, participants indicated that OPHEA provided teachers with a large number of documents and lesson plans that could be used in PE classes. All participants perceived that the support they received from OPHEA facilitated their adaptation process to the new curriculum. One teacher mentioned that other health organizations facilitated her adaptation by offering their support. This, coupled with the elaborate praise for OPHEA, reinforces the importance of supporting organizations outside the school realm (Ha et al., 2004; Wirszyła, 2002).

Conclusion

The purpose of this study was to investigate factors affecting experienced PE teachers during a period of curriculum change and what was perceived to facilitate or inhibit this adaptation process. It appears that the specific effect of experience on the adaptation process may be minimal as suggested by the two major conclusions that emerged from this study. First, it appears that the experience a teacher possesses can increase his or her level of confidence in effectively teaching PE, which can have a facilitative effect on the adaptation process. However, the participants perceived that beginning teachers possess different factors which allow them to adapt just as effectively, or ineffectively, to curriculum changes compared to their experienced counterparts. The effect of experience on the confidence level of PE teachers, and their effect on the process of adapting to a new curriculum, is a new factor identified through this research that needed to be further addressed by future research.

Second, the current study revealed that it is not necessarily the experience of the teacher that will have the largest influence on adaptation, but rather the individual personality of the teacher adapting to the curriculum change. The participants indicated that some personality traits may cause a PE teacher to be adaptive and some personality traits may cause a PE teacher to be resistant to change, and it is not necessarily the experience of the teacher that will influence this personality. In previous work by Richardson (1990), the concept of willingness has been investigated as a determinant of adaptability. However, this area has hardly ever been addressed by previous research (Curtis and Cheng, 2001; Richardson & Placier, 2001) and thus, the current researchers consider this a gap to be addressed in the future studies.

The effects of other factors identified in this study on the adaptation process of PE teachers have been extensively researched (Armour & Yelling, 2007; Bechtel & O'Sullivan, 2007; Butler, 2005; Johns, 2003; Dwyer et al., 2003). Data from the current research was able to confirm the results of these studies by investigating their influence on the adaptation process to a curriculum change in Ontario. In addition to corroborating the importance of these factors, this study demonstrated that these factors can also influence the adaptation process for *experienced* PE teachers.

The perceptions of the participants in the current study exposed the facilitators and inhibitors of experienced PE teachers adapting to a curriculum change. Taking these factors into consideration when implementing a curriculum change could potentially increase the fidelity of what is being proposed. Furthermore, curriculum planners and policy makers should not just *consider* these factors, but also seek the input and collaboration of practicing PE teachers when creating and implementing a curriculum.

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