

**What does the effect of extension activities have on  
MAT learners' learning engagement?**

|          | Target                                                                                                                                                                          | What I have done in this assignment.                                                                                                                  |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target 1 | Ensure you balance your discussion, giving consideration to both benefits, limitations and challenges                                                                           | In this essay I made sure to consider both the benefit, limitations and challenges to the methodologies I used to ensure I had a balanced discussion. |
| Target 2 | When discussing recommendations for future professional development be specific. Discuss particular strategies that could be of use and support your discussion with literature | In this essay I have attempted to be more specific with my recommendations by listing resources I will use and have engaged with.                     |

An issue that interested me was how best to engage the more able and talented (MAT) learners. I have often seen extension activities being used to educate MAT pupils. Therefore, it was decided to see 'what does the effect of extension activities have on MAT learners' learning engagement?' Additionally, challenging and stretching MAT learners was a target of mine for the second half of my placement. Therefore, I felt this assignment, and the research days would provide an excellent opportunity for me to develop my knowledge of MAT pupils and how to challenge them. Furthermore, Estyn's (2011) report highlighted that only a few schools were challenging and enabling MAT pupils to achieve their potential. Thus, I felt this was an issue that needed to be addressed and that more research needed to be conducted into this field. The definition of MAT is often used in Wales to refer to pupils who are more able and talented across the curriculum and those who show ability in one or more areas of learning (Qualifications, Curriculum and Assessment Authority for Wales, 2003).

The two lesson studies were carried out in the same school and the same classroom, however, with different pupils as the three participants. The school in which the research was conducted in shall be referred to as School X. School X is a large inner-city school with 372 pupils on roll, 26% of the pupils receive free school meals, and 17% have additional learning needs (Estyn, 2019). The classroom in which the assignment was undertaken in is a small year 2 class of 21 pupils, where there is one pupil with an official diagnosis of an additional learning need (ALN) and three pupils who have English as an additional language (EAL). Due to the nature of the assignment question, the research focused only on pupils who have been identified as MAT learners by the classroom teacher.

In order to provide the MAT pupils with a main activity and extension task that challenged and stretched them, their work was differentiated to meet their learning needs. George (2005) refers to differentiation as *'the process by which curriculum objectives, teaching methods, assessment methods, resources, and learning activities are planned to cater to individual needs'* (p.105). Hewston et al., (2005) highlights that the process and concept of differentiation differ from country to country and from educational system to educational system, resulting in a lack of clarity and an inability to evaluate the relative advantages and disadvantages of differentiation. The Welsh Assembly Government (WAG)(2015), however, view differentiation as a vital strategy in education because it enables teachers to provide pupils of all abilities with work that is challenging. Additionally, WAG (2015) asserts that differentiation provides opportunities for MAT learners to develop their independent skills. Marquez and Sawyer (1994) indicate that differentiation for MAT pupils involves creating a curriculum which enhances their learning potential and encourages them to

engage with topics that interest them, at a pace that meets their needs and abilities. Estyn's (2019; 2012; 2011) reports support this view by highlighting the many benefits that differentiated and an individualised approach to learning, have on MAT learners. The reports discuss that in environments where differentiation occurs, MAT pupils thrive and are motivated because their voices are considered and listened to with regards to choices about how and what they learn. Estyn (2019) further concludes that when MAT pupils are inspired, they show high levels of engagement, persevere, and resilience in their learning, which sees pupils grasp and master abstract ideas and skills. Furthermore, through differentiating work and resources, teachers can provide MAT pupils with activities that are individualised to meet their needs within a framework of guidance and support that is appropriate to their learning needs. Thus, incorporating Bruner et al., (1976) theory of scaffolding, because although the pupils' work is differentiated, they are still provided with a necessary framework and assistance to complete a task that would be impossible unassisted. Research has shown that pupils are more successful in classrooms where differentiation occurs because teachers can plan and implement the curriculum based on individual pupils' readiness, skills, and knowledge instead of using the same pedagogical approach for all pupils. (Shore et al., 1991; Tomlinson & Imbeau, 2010). Indeed, there is an agreement amongst the literature that a differentiated curriculum is of prime importance to challenge and meet the needs of all learners (George 2003; Eyre, 1997; Freeman, 1998).

However, Leyden (2002) indicates that effective differentiation must include opportunities to develop the complete array of intelligence outlined in Gardner's (1993) work rather than focusing solely on opportunities for mathematics and linguistics. Estyn (2019) highlights that changes to the curriculum have led to a decrease in opportunities for pupils to develop their sporting, creative, and technological skills. This assertion is further reinforced by the WAG (2015), who indicate that national and local priorities of increasing standards in numeracy and literacy have taken precedent over MAT provision, resulting in provisions for MAT pupils differing widely between schools. However, a more holistic approach to education discussed by Hattie (2012) and Steiner (1996) has become more prevalent within educational circles, which should potentially address this issue by promoting schools to develop the whole child and all their talents. Additionally, Donaldson's (2015) New Curriculum and new Areas of Learning highlight the importance of developing all talents and skills of pupils, including creative and technological capabilities.

Hewston et al.,(2005) indicates that a common approach to providing a differentiated curriculum for MAT pupils is the use of enrichment activities. Schiever & Marker (2002) define enrichment activities as diverse educational opportunities that come about when the

curriculum has been adapted, changed, or extended. Enrichment activities can be provided to pupils by differentiating their context and providing them with activities that encourage them to use their higher-order thinking skills to analyse, synthesis, and evaluate ideas. Hewston et al.,(2005) concludes that enrichment activities are often referred to as extension tasks, therefore in keeping with the research, this essay has called its enrichment activity an extension activity. White's et al., (2003) research has shown that extension activities are an essential part of MAT pupils' education in the UK. Furthermore, Estyn (2019) supports this view by concluding that the most effective schools plan additional extension activities for MAT pupils to extend their learning, which positively impacts the pupils' attainment and self-esteem. Although, if the implementation of extension activities is not managed effectively, they can have a negative impact on those not included (Teare, 1997). Additionally, Herzog's (2003) and Wright's & Lerouz's (1997) research has shown that MAT pupils who receive additional classes and activities often feel isolated or different. Recent studies have acknowledged this issue and recommended the use of extension activities within the class to lessen MAT pupils' feelings of isolation (Eyre, 2002; Teare, 1997). This type of extension activity is increasingly being used within the educational practice and will be used within the lesson study.

Thus, the research on both differentiation and extension activities indicates that they are potentially the most successful approaches to use when teaching and challenging MAT pupils (Hewston et al., 2005). But the provision of differentiation and enrichment activities for MAT pupils relies too heavily on funding and the availability of resources within schools (Hewston et al., 2005). Therefore, despite the benefits of these approaches, schools are often unable or unwilling to provide opportunities for extension activities that develop the whole pupil and their different talents of pupils. Additionally, many schools choose to focus solely on developing MAT pupils' mathematical and linguistics skills rather than developing all their subject knowledge, talents, and abilities (Estyn, 2019). Thus, a systematic expectation within regions and across schools, as asserted by Estyn (2019), may be necessary to combat this inconsistency.

The method of data collection used was a lesson study, observation, interview, and a reflective model. Two lesson studies were undertaken on two separate days with a research partner. A lesson study aims to improve the quality of teaching through a reflective, recursive, and collaborative process (Dudley, 2011). The process involves a group or pair of teachers collaboratively planning a lesson, which is then taught by one member of the group while the other participants watch (Dudley, 2011). Rock and Wilson (2005) discuss how a lesson study develops and strengthens a teacher's collaborative skills because, as a result

of the process, participants become more willing to participate in discussions. This increased discussion has a positive impact on the participants' knowledge, skills, and practice as it provides them with the opportunity to reflect on their practices and identify the challenges they face and the challenges their learners face (Timperley et al., 2007; BERA, 2018). Additionally, Cajkler et al.,(2015) research indicates that lesson studies result in teachers having a sharper focus on pupils' learning because specific time is given to teachers to conduct research. Thus, providing the teacher with time to focus on the deeper substance of their work and the time to develop their practice and pedagogical knowledge (Dudley 2011; Galanouli 2010; Tall 2008). However, Cohen et al., (2013) highlight that the simple presence of the researcher might bring about a difference in the behaviour of the participants. Therefore, to minimize this effect, the researcher kept their distance from the pupils while observing and reassured them that there was no correct or incorrect way to behave (Punch, 2002).

Furthermore, an observation was undertaken as part of the lesson study. The observation was carried out in the style of a non-participation observer. An observation can be thought of as a process of documenting the behaviour patterns of a person, an occurrence, or an object (Cohen et al., 2013). The methodology of observing was chosen for this assignment as it provides the researcher with opportunities to develop their observation skills. Skills which Grigg (2010) asserts are essential for a teacher to have because much of their day to day practice revolves around observing pupils. Additionally, through observing the lesson, the researcher can see the pupils and the extension task within its natural context (Cohen et al., 2013). Providing the researcher with the ability to ask what Tripp (2012) asserts are crucial questions when conducting research '*what happened and what caused this,*' (p. 9) which the researcher would be unable to answer without the context of the observation. Three MAT pupils were chosen to participate in the observation, and they were observed using an adapted version of the Leuven Scale (Lavers, 2008; Appendix three and seven) to assess their level of engagement. The observer wrote written notes as part of the observation and the lesson study, which were then shared with the research partner. Cohen et al., (2013), however, highlights that observations can often be unreliable because they are a simple snapshot of a lesson and only the behaviour and physical characteristics of the participants are examined, which could affect the validity of the data. The data, therefore, will be analysed in triangulation with the interview notes and reflection notes to reduce the reliance on one methodology and data, thus increasing the reliability of the research data (Cohen et al., 2011).

Additionally, an interview will also be conducted alongside the lesson study and the observation. Kvale (1996) defines an interview as an '*interchange of views between two or more people on a topic of mutual interest*' (p. 14). A semi-structured interview has been chosen for this assignment because of the flexibility it allows the researcher. Cohen et al., (2013 ) discuss the benefits of a semi-structured interview as it enables the researcher to probe the participants to expand upon their answers, providing the researcher with a deeper understanding of the participants' views and feelings. However, due to the interactive nature of interviews, biases can occur (Cohen et al., 2013). Therefore, to strengthen the reliability of the information collected from the interview, it will be used in triangulation with the lesson study and the observation notes. Bell (2018) additionally, asserts that an interview can cause the participants anxiety, therefore, to decrease the pupils' anxiety, the interview was conducted in a group setting, and on a semi-circle table.

Lastly, a reflective model was used, Gibbs' (1988) and Brookfield's (1995) reflective models were combined to create an adapted reflective model (Appendix four and five). A reflective model allows the researcher to actively and dynamically deal with complex and challenging situations to improve their practice (Moon, 1999). Gibbs model provides the researcher with an opportunity to analyse and evaluate their techniques to enhance their practice (Moon, 1999). Thus, providing the researcher with recommendations to improve their practice and guidance for the next lesson study. Atkins and Murphy (1993) criticise Gibbs' model because it fails to account for the views of other individuals. However, for this assignment, an adapted version of Gibbs' model was used, which incorporated the various views and opinions of others from Brookfield's (1995) model. Therefore, the opinions of the research partner were sought to provide a much broader and deeper reflection and to reduce potential unrecognised bias (Cohen et al., 2013).

There are multiple ethical considerations when researching in a classroom, in the present study, ethical considerations focused on anonymity and confidentiality of pupils, and the assent of pupils. BERA's (2018: 21) ethical guideline, which this assignment adheres to, considers the confidentiality and anonymity of participants as the norm. Therefore, all data will be anonymised and held securely to guarantee that no pupils will be able to identify themselves from the research and data. Alderson (2004) acknowledges that consent is a crucial issue in researching with children. The consent of the parents was sought through letters, and the assent of the pupils was sought during the lesson through a happy and sad face system. Additionally, ethical consideration was given to ensure the pupils did not feel uncomfortable, unhappy, or pressured to answer. Thus, the participants were interviewed all together on a round table to minimise this issue (Nutbrown & Hannon, 2003).

In line with Dudley's (2015) handbook on lesson study, three pupils were chosen to participate in each of the lesson studies. Due to the nature of the research question, pupils were selected from the two higher ability groups to represent MAT pupils. Observations were carried out throughout the entire lesson by the researcher on the three pupils. Additionally, the pupils were given a score out of 5, on an Adapted Version of the Leuven Scale of Active Engagement in Learning (Lavers, 2008). Because of the age of the participants, they were interviewed immediately after the lesson study had finished ensuring they remembered what had happened during the lesson and to minimize possible inaccuracies of their views and opinions (Cohen et al., 2013). Furthermore, when conducting interviews, participants may feel pressured to give a correct or right answer (Punch, 2000). Therefore, the interview was conducted on a round table with all participants present. Additionally, reassurances were also given to the pupils that there is no right or wrong answer to the questions asked. In order to follow the lesson study layout, the researchers shared their notes after the interview and discussed their findings together (Dudley, 2015). Once the lesson study had been discussed, and written notes shared, the researcher then used an adapted reflective model to promote further analysis of the findings. Brookfield's reflective model (1998) and Gibbs' reflective model (1988) were combined to create a modified version that allowed for the incorporation of different views and opinions, producing a more in-depth and less singular reflection.

The lesson in which the observation was conducted in was a mathematical lesson focusing on measuring ribbons and recording the answer. The three pupils who were observed shall be referred to as Child 1, Child 2, and Child 3. All pupils were able to complete the main activity and move onto the extension task. When reflecting on the lesson, both researchers concluded that the main activity was not very challenging or difficult for the pupils (Appendix four). Therefore, it was difficult to assert what effect the extension task had on the pupils' engagement during the main activity because they spent less than five minutes completing the activity. The ability to provide challenges for MAT learners can be daunting and a difficult task. But WAG (2008) asserts that delivering day to day challenges for MAT learners is central to meeting their needs and development. However, the pupils stated during the interview that they wanted to do the extension task because it 'looked fun,' and it allowed them to 'learn different things' (Appendix one). Indeed, Child 2 and Child 1 were observed by the researcher to be at Level 4 on the Leuven Scale showing signs of continuous activity with intense moments (Appendix three). Both pupils were observed to be engaged and concentrating on the activity without interruption most of the time. However, when the

researcher left the table to assist another group, their attention became more superficial, which is hardly unusual with a year 2 class. Child 1 and 2 were highly motivated to complete the main activity, with both making remarks to each other about who could finish the quickest and fastest. Furthermore, during the interview, Child 1 and 2 remarked that they found the task 'amazing' and 'good' (Appendix one). However, the competitive nature between Child 1 and Child 2 possibly could have been more of a motivating factor than the extension task. Additionally, both pupils have a fondness for maths, which Child 1 expressed during the interview (Appendix one). Their enjoyment of the subject and their competitive drive potentially may have contributed to their high levels of engagement rather than the extension task.

Child 3 did complete the main activity, but their level of engagement with the task was not as high as Child 1 and 2. Child 3 was frequently disengaged with the task and showed no real drive to want to complete the extension activity. Child 3 was observed to be at Level Two on the scale during the main activity, as they were frequently disengaged and rushed to complete the activity (Appendix three). This outcome was predicted before the lesson by the researcher, who concluded that Child 3 typically rushes their work and often does lack motivation (Appendix four). Their lack of motivation is something the classroom teacher is attempting to address with the pupil. However, during the interview, Child 3 reported that they thought the main activity was 'good' and that they wanted to do the extension task because it looked 'fun' (Appendix one). Punch (2000) discuss the fact that pupils who see researcher in the role of teachers may feel pressured to give what they believe to be the correct answer, rather than their genuine opinion. Child 3 may have possibly felt this way and said the activity was fun despite them being observed to be disengaged because they believe this is the correct answer (Punch, 2002).

To fully capture the effect an extension task has on the pupils' engagement, the main activity needed to be a more challenging task. Estyn (2019) indeed highlights the fact that too often, MAT pupils receive extension tasks after finishing the first activity too fast and easily. This practice does not ensure the pupils adequately challenged during the entire lesson (Estyn, 2019). This issue is something that needed to be addressed and changed before the next lesson study, to ensure that the main activity would challenge and stretch the MAT pupils to achieve their full potential and to enable the researcher to gain a better understanding of the effect of the extension task. Therefore, the main activity of the second lesson study was adapted through providing the pupils with polar bears that were in between two numbers, introducing the pupils to decimals, specifically figures holding a decimal value of 0.5. The

concept of estimating was also added to the work because the researchers concluded it would provide an additional challenge for the pupils (Appendix six).

The second lesson study was carried out in the same classroom as the first lesson study and was a continuation lesson (Appendix six). Three participants were chosen to be observed, and they shall be referred to as Child 4, Child 5, and Child 6. Similar results from the first lesson study were seen, with Child 4 and Child 5 exhibiting continuous engagement with the main activity, and Child 6 frequently exhibiting disengagement (Appendix seven). Child 6 indeed needed to be reminded to stay on task with the work. The adaption of the resources from the previous lesson study had a positive impact as it provided the researchers with more time to observe the participants undertaking the main activity. Additionally, the adaption meant the work now offered a challenge to the pupils. The outcomes of the lesson study were predicted before the lesson by the researcher, who reported that Child 4 and Child 5 would be at level 4 while Child 6 would be at level 2 because Child 4 and Child 5 are two of the higher attaining pupils within the group, whereas Child 6 is not as able (Appendix five). Furthermore, the extension task for this group required the pupils to work in pairs or threes, Child 4, and Child 5 are quite close friends, meaning they wanted to complete the extension task together. Indeed, Child 5, in the interview, remarked that their favourite part of the extension task was working with Child 4 (Appendix two). Whereas Child 6 is not as close with the pupils in their group, with most of their friends being in the other groups. Child 6's lack of friends could have possibly hindered their motivation to complete the extension task. Child 6, indeed, did ask the researcher if they could go and chose once they had spent a few minutes on the extension task. Herzog's (2003) research has shown that MAT pupils who receive extra opportunities may often feel isolated or different from their pupils, which can cause problems with their peer groups. Child 6 may have potentially felt this way, but this is difficult to conclude from one observation and one lesson. A team working extension task was planned because team working skills, as asserted by Renzulli (1997), are often underdeveloped within MAT pupils because they are often given extension activities which require them to work individually. This activity, therefore, was chosen to help build the pupils team working skills. Furthermore, during the interview, Child 6 stated they liked the main activity and wanted to do the extension task because it looked fun (Appendix two). However, Child 6's answer may have been influenced by the fact that the other pupils said they enjoyed the main activity and wanted to do the extension task (Punch, 2002).

The extent to which the extension activities affected the MAT learners' learning engagement is difficult to conclude from just two lesson studies. The evidence suggests that an extension

activity can affect a MAT learner's engagement though the extent of the impact is difficult to conclude. All pupils stated they wanted to complete the extension activity, possibly alluding that the extension activity could have motivated them and had an effect. However, some of the pupil's statements were contradictory to what was observed by the researcher calling into question the reliability and validity of their comments. Child 1, 2, 4, and 5 were observed to be engaged with the main activity suggesting that the extension activities could have positively affected their learning engagement. However, Child 3 and 6 were observed to be disengaged with the main activity and the extension activities, suggesting that the extension activity may have had a negative effect on their learning. The data, therefore, was not conclusive with regards to the effect extension activities have on MAT learner's engagement. The data instead suggest that extension activities affect pupils' learning engagement differently and that pupils respond differently to activities and have different levels of engagement. Additionally, internal influences, as highlighted in this essay, may have affected the pupil's engagement making it difficult to conclude for sure that only the extension activity affected their engagement. The analysis of the data, however, does indicate the importance of providing MAT pupils with appropriate challenges and extension activities. These findings are supported by Estyn (2019) and WAG (2008), who state that providing appropriate challenges and extension activities for MAT pupils is central to meeting their needs and development. The researcher was not surprised by the outcome of the lesson, as the pupils behaved and acted as they usually do in any lesson. This consistency in behaviour may potentially have occurred because both researchers have been teachers in the lesson study classroom, meaning the pupils may not have viewed their presence within the classroom as unusual.

Furthermore, the findings of the lesson study cannot be generalised because only two lesson studies were carried out, which does not provide the researcher with enough evidence and data to come to a generalisation. Indeed, Dudley's (2015) lesson study model includes three lesson studies, which has a much larger sample size than the lesson studies conducted by the researcher. Although similar results were exhibited between the two lesson studies, further research still needs to be undertaken to be able to come to a conclusion and a generalisation. This undertaking, however, may be difficult since there are relatively few methodological studies and research on MAT provision and education (Hewston et al., 2005). Furthermore, the research that is conducted into the field, Ziegler and Raul (2000) criticise because often they are case study examples of excellent practice, reflecting the practitioner's views rather than actual research. Additionally, the vast and diverse range of differentiation and extension activities in practice alongside the relatively small amount of MAT pupils, makes research even more challenging to conduct (Ziegler & Raul 2000).

Cohen et al., (2013) discuss the fact there is an issue of inference when conducting an observation because the observer can only record what they see and what happens. The use of a triangulation method, which included interviews, was used to minimize this effect. However, because the participants are children, there is the risk of their views, opinions, and intentions not being their own (Cohen et al., 2013). This limitation is further strengthened through the school setting of the research, as the participants might view participating in the study as schoolwork and that they need to give a correct answer (Kellet & Ding, 2004). Morrison et al., (2000) highlights that interviewers conducting interviews on children should undertake specialized training to overcome the barrier of inaccuracy. The researcher does have plenty of experience communicating and working with children, but they are not an experienced interviewer or researcher. The Lesson Study Handbook (Dudley, 2015) indeed, states a lesson study works well when a senior member is involved, and the teachers have a mixture of teaching experiences. However, the research days were undertaken with a partner enabling the researcher to seek advice and support from their partner about any uncertainties they had, resulting in a more in-depth analysis (Ho & Kane, 2013).

The method conducted, nevertheless, has benefits and strengths for the professional development of the researcher (Dudley, 2011). The process of planning, implementing, and reflecting on the lesson study is done on the principle of sharing professional knowledge and practice with one's partner (Dudley, 2011). Seeking advice and supporting the development of others is a professional standard that must be demonstrated by a trainee teacher (WAG, 2018). This assignment, therefore, provided the researcher with the opportunity to develop this standard through seeking and engaging with support by observing another colleague teach and participating in professional and reflective discussions with them. Additionally, Fernandes & Yoshida (2004) assert that conducting a lesson study is the best way to improve education because it encourages teachers to work in collaboration together to study the process of teaching and learning in classrooms and then devise ways to improve them. This encouragement to work in collaboration increases the researcher's willingness to participate in discussions regarding their professional development (Rock and Wilson, 2005). Promoting the researcher to reflect upon their practice and identify the challenges their learners face, which positively impacts their pupils' outcomes and their practice (BERA-RSA, 2014). Thus, developing the researcher into a reflective practitioner, which, according to Schon (1992) is the artistry of competent practitioners, because it provides the researcher with ways to learn from their practice and ways to develop their professionalism and expertise, (Jasper, 2003).

In future practice, the researcher plans to provide MAT learners with extension activities because they recognise the value of using them. Although the lesson study data showed that not all pupils' learning engagement were affected positively by an extension activity, they nevertheless provide pupils with opportunities for further learning. If extension activities are challenging and engaging for the pupils, the researcher believes they can potentially have a positive impact on the learner's learning engagement. Estyn (2019) supports this view by finding that the most effective schools plan appropriate additional extension activities for MAT pupils to extend their learning, positively impacting the pupils' attainment and self-esteem. The researcher will use the Estyn reports that identify good practice for MAT pupils (2008; 2011; 2012; 2019) to support them in planning and creating extension activities that challenge and stretch them. However, Estyn's (2011) report identified that only a few schools provide challenges and extension activities for MAT pupils because the education of MAT pupils relies heavily on the effectiveness of the individual school and their provisions and resources. This reliance can and has resulted in differences between the quality of provision and education given to MAT pupils in different schools (Estyn, 2019). Thus, questions need to be asked about how to overcome the differences in MAT teaching in various schools and whether a mandatory framework or policy is necessary (WAG, 2013).

With the introduction of the new teaching standards, research conducted by teachers should become more common in the teaching profession (WAG, 2015). Additionally, as classrooms become increasingly diverse and more challenging personalised research undertaken by the teacher becomes more vital, as it provides teachers with strategies and resources that are suited to their classroom and pupils (Kincheloe, 2003). This assertion is supported by WAG (2017), who view teacher-led research as an avenue to raise the quality of teaching and learning because it positively impacts student outcomes (BERA-RSA 2014). However, as noted by Milton (2003), teachers do not view themselves as researchers and are reluctant to undertake research projects due to the demanding workload of teaching and issues of motivation (Ilisko et al., 2010). Thus, if evidence-based practices and research is to be undertaken by teachers, a change in ideologies will need to take place alongside the provision of additional time and resources to enable teachers to become researchers.

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