

# **Establishing a Well-being Equilibrium? An approach for trainee science teachers**

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## **Abstract**

For trainee teachers, juggling “work-life balance” can be overwhelmingly impossible. A 90 minute lecture was trialled with a cohort of PGCE Science trainee teachers containing models and theories to support teacher well-being and enhance understanding of difficult pupil behaviour. Findings revealed that a lecture style of well-being input was extremely positive and that the therapeutic models were highly regarded. This type of intervention was reported necessary to support trainee teachers and equip them for their career.

## **Introduction**

Well-being is a key aspect of maintaining a work-life balance. It can be described in terms of three basic areas: mental and emotional well-being, physical well-being and social well-being (Humes, 2011). These all need to be personally managed; however, within a busy school day, teachers and pupils alike experience an array of different emotions (joy, fear, upset due to an event), physical demands (constant talking and movement), social pressures (other staff, parents, pupils) and general pressure/tiredness.

Maintaining a work-life balance as a teacher can be challenging and difficult to achieve. For science teachers mastering the subject knowledge of three science subjects to confidently teach can be challenging, especially learning to pitch this content to the appropriate needs and level. In the early days of training, the time to upgrade subject knowledge and plan lessons can be overwhelming and previous work (Turner, Braine and Zanker, 2009) indicates that trainee teachers can forget to look after themselves amidst the business. Maslow’s hierarchy of needs (1970) suggests that to be able to sustain positive self-esteem and well-being and therefore fulfil their potential, individuals require their basic needs to be met: physiological (food, drink, sleep) and feeling of safe and secure in the workplace. However, these matters are not always seen as a priority by teachers (Turner, Zanker and Braine, 2012).

Effective time management is a key skill required by teachers from initial training and throughout their life-long careers. However, the reality of balancing lesson planning, marking, report writing, coursework assessment and other responsibilities, which

occur on a daily basis, can be difficult for any teacher to manage. Work-life balance concerns could commence during the initial teacher training year as it is a demanding time and requires self-motivation and resilience; there is much to learn about and how trainees respond to the demands of their training course and capability to manage this can depend on their personal characteristics, competences and their own social environment (Gu and Day, 2013). Growing research (Beijaard et al., 2000; Beijaard et al., 2004; Williams, 2014) shows the importance of trainee teachers learning more about themselves and their teacher identity during their training year as this may impact on future attrition.

This research focuses on engaging with trainee teachers and equipping them with the skills to manage their work-life balance during the training year and follows on from earlier research reporting that teaching practice is stressful, challenging and exhausting (Turner, Zanker and Braine, 2009; Turner, Zanker and Braine, 2012). The research included lecture input (which was deemed an appropriate method to disseminate information due to the large size of the course and also due to time constraints within the course) which had been specifically designed to address the issues highlighted, onto one PGCE course and the evaluation of the effectiveness of embedding the necessary skills required into their teaching practice early on.

## **Methods**

### **Pilot Study**

To understand the general work-life balance of trainee teachers, a small pilot study was undertaken which provided crucial information to develop the content of the main study (the lecture). The aim of this was to provide evidence of the lifestyle of trainee teachers during the most intense period of each teaching practice, the final four weeks.

The pilot study, comprising of two trainee teachers (opportunistic sample of one male and one female both who passed the course as a good and very good trainee respectively) in two different science specialisms, were asked to complete diary exercises over a four week duration at the end of each teaching practice. On a weekly basis, they were asked to record the number of hours worked outside of school, sleeping/eating/social activities and record any particular events that had occurred during the week. These areas arose from Maslow's Hierarchy of Needs; a consideration of basic needs that we need to function well. These data, despite a small sample, were useful to feed into the lecture content (for example the theory/models chosen to be taught, specific areas such as stress management to include and discussion points to raise) and helped to shape the needs of trainee science teachers to be addressed.

## **Main Study**

This small scale project involved investigating whether therapeutic training through a 90 minute lecture would change or impact on secondary science trainee teachers' lives on their final teaching practice. A lecture was planned and designed to deliver key information to meet the needs of trainees raised from the pilot study (such as stress management techniques, theory/models on theirs and children's behaviour) and fitted in with the time element of already full course. This research was underpinned by an interpretative approach as it was '...interested in people and the way they interrelate – what they think and how they form ideas' (Thomas, 2009, p. 75). This was a small case study to provide teacher educators with information to enable development of their teacher training programmes on their trainees' well-being.

An opportunistic sample comprising of a population of 15 secondary trainee teachers were invited to attend a 90 minute lecture on theories and practical advice to enhance their well-being during their main teaching practice (and beyond).

A questionnaire was written by the authors to attempt to understand the usefulness of the 90 minute lecture for their teaching and well-being during the University component of the course and the teaching practice. A follow-up, post teaching practice questionnaire reviewed any impact of the lecture on their teaching practice, topics remembered or utilised (and if so where), and asked whether they managed a work-life balance.

## **Models**

Within the lecture the models/theories selected to share with the trainee teachers were felt appropriate after consideration of content on psychology training courses, counselling courses and psychotherapeutic training courses. The basic outline of the lecture content was:

- Mental health statistics on a national scale for children and teachers
- CAMHS and support at Tier 1
- The emotional development curriculum
- Field Theory (Lewins, 1951)
- Stress – behavioural indicators
- Rogers' Core Conditions
- Maslow's hierarchy of needs (1970)
- Work and wellbeing discussion

After the lecture, trainees were able to discuss their first placement school experiences together. This was useful for trainees to consider why work is good for their well-being and why it is not and to reflect on their personal responses to plan an overall individual work-life balance pattern during their own teaching practice. Stress

advice was provided drawing on work from Harris (2007) and Robertson and Cooper (2011) and provided trainees with knowledge of indicators of being stressed such as irritability, cynicism, social withdrawal, general worry and disruption to sleep/appetite and their energy levels. A rating scale was used for trainees to consider 14 key factors in looking after themselves. Statements such as 'I sleep well most nights; I eat healthily most of the time; I exercise regularly; I am moderate in my use of alcohol/caffeine' were answered on a scale of 1-10. This was to help trainees assess themselves and to be self-aware of their own lifestyle and behaviour and it was suggested they try this exercise again during their second teaching practice and see if any of their answers changed.

## Results

### Diary Data – Pilot Study

Diaries were completed during the last four weeks of the two teaching practices. The trainees were asked to comment each day on the following areas: sleep, eating, hours worked, leisure time/family time. The data were summarised in a table below:

<b>Week 8</b>	<b>Disturbed sleep</b>	<b>Disrupted eating</b>	<b>Number of hours worked after school</b>	<b>Participated in usual leisure activities</b>	<b>Usual time spent with family/friends</b>
<b>Female</b>	No (except Sunday)	No	Average 4 hours per night	No	No
<b>Male</b>	Yes (everyday)	No (though snacking more on biscuits)	Average 4 hours per night	Yes – swimming on Thurs; golf on Saturday	No
<b>Week 9</b>					
<b>Female</b>	No (except Sunday)	No	Average 4 hours per night	No	No
<b>Male</b>	No (everyday)	No (snacking more on biscuits)	Average 4 hours per night	No	No
<b>Week 10</b>					
<b>Female</b>	No (except Sunday)	Skipped lunch twice	Average 5 hours per night	No	Sunday – family day out
<b>Male</b>	Sunday and Monday (being	Yes – takeaways and ready meals	Average 4 hours per night	No	No

	observed on Tues)				
<b>Week 11</b>					
<b>Female</b>	No	No	Average 3 hours per night	No	No
<b>Male</b>	Yes – everyday	Yes – school dinners/takeaways	Average 6 hours per night (catching up with marking)	No	No

**Table 1: Diary responses from the two participants (end of first teaching practice weeks 8-11)**

The pilot study diary entries showed that: sleep was affected at key points during the teaching practice mainly Sunday night as a result of anticipating the week ahead or if an observation was imminent. Eating was generally normal however the female commented on being too busy to eat lunch sometimes during the school day and the male commented on a lack of time to cook so ate takeaways or had school dinners as no time to make sandwiches. The additional hours worked each week for the female ranged from 15hrs – 25hrs; for the male 20-30hrs. Usual leisure activities were not participated in and neither was usual time spent with family/friends.

<b>Week 8</b>	<b>Disturbed sleep</b>	<b>Disrupted eating</b>	<b>Number of hours worked after school</b>	<b>Participated in usual leisure activities</b>	<b>Usual time spent with family/friends</b>
<b>Female</b>	Sometimes (if being observed; teaching a new bit of science)	No	Average 4 hours per night	No	No
<b>Male</b>	Sometimes (everyday)	No (snacking more on biscuits)	Average 5 hours per night	No	No
<b>Week 9</b>					
<b>Female</b>	Sometimes (Yes Wed night as Uni observation on Thurs)	No	Average 3.5 hours per night	No	No
<b>Male</b>	Sometimes	Yes	Average 6	No	No

	(everyday)	(takeaways 3 nights)	hours per night		
<b>Week 10</b>					
<b>Female</b>	Sunday and Thursday	No	Average 4.5 hours per night	No	No
<b>Male</b>	Sometimes (everyday)	No	Average 5 hours per night	No	No
<b>Week 11</b>					
<b>Female</b>	No	No	Average 3 hours per night	No	Yes Sunday and Friday
<b>Male</b>	Sunday, Monday, Tuesday	No	Average 3 hours per night	Yes – swimming on Thurs	No

**Table 2: Diary responses from the two participants (end of second teaching practice weeks 8-11)**

The pilot study diary entries during the final four weeks of the final teaching practice reveal that: more disturbed sleep than the first teaching practice and often a Sunday night before the week ahead or before important observations. Only the male commented on changed eating habits reporting he snacked more on biscuits and some takeaways. The female worked between 15-22.5hrs per week additional and the male worked between 15-30hrs. Usual leisure activities and time with family/friends were reduced.

Additional comments to the female's diary entries were (after the first teaching practice):

'I like to produce my own resources however I am realising that it is impossible on top of the other demands such as marking, writing essays and planning' (female).

'I feel guilty as I cannot spend as much time as I would like with my family and haven't seen my friends properly for a long time now'.

Additional comments after the second placement: 'Due to being so busy, I am struggling to see how I will cope with the demands during my NQT year; it is good when I teach a topic already taught again to the same year group; I am finding that learning some Yr 12 subject knowledge to help teach revision sessions is demanding as I've not taught the whole specification'.

The diary data showed that Maslow's hierarchy of needs should be addressed in the lecture (sleep/food for example). The hours worked and change in their leisure

activities/family/friend time revealed that trainees do struggle to manage a work life balance. Additional pressures in a teaching practice, for example new tasks such as the challenge of being observed added to their stress levels. These data helped to structure the lecture content selection.

### Findings from the first questionnaire following the lecture

100% of secondary trainees agreed the inclusion of this knowledge should be included in a PGCE course. The trainees stated they would prefer less information on the statistics and more information on coping strategies.

The trainees were asked to consider the points from the lecture that they found the most useful. There were a large number of different responses so these were categorised into 5 areas which the responses were assigned to: personal, pupil-related, teaching-related, staff or informative.

**Table 3: Points from the lecture that all trainees stated they found useful.**

Practice Codes	Code description	Session Link	Sample Data
Personal	Well-being, personal comments, stress, anxiety	Stress responses Our emotional material	Looking after my own well-being is so important and how much that impacts on the children in my care. I looked at the ways to manage stress/anxiety. The prompts for feeling angry.
Pupil	Behaviour, rapport, needs, tutor role.	Rogers' core conditions; Parent- adult-child model; Mental health statistics/CAMHS	I was very aware of wanting to meet my children's needs. I felt I understood more about why by pupils behaved as they did, especially if they were angry/upset. How important it is for children to feel safe and secure in my classroom. I kept thinking of different ways to communicate with pupils to help them and to build up relationships with them.
Staff colleagues	Peers, relationships.	Our emotional	I found some

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		material in school; Maslow's hierarchy of needs	conversations difficult with other staff. I settled in really quickly. I found being observed by other staff stressful. I thought more about how to build secure relationships in the school.
Teaching	Behaviour, organisation	Concept of good enough; Maslow's hierarchy of needs; Rogers' core conditions	I thought more about my classroom layout and the dynamics I wanted in my classroom. I tried to make sense of some of my teaching experiences. Throughout I felt that because I tried to be more aware of all of the emotions in the classroom I built up better relationships.
Informative	Theories, models, specific factual information	All models; Mental health statistics	The links to Maslow's work, especially about sleep and eating stayed with me a lot. I remembered the parent-adult-child model. The mental health statistics reminded me pupils in my care may be suffering.

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Responses surrounding inclusion of this type of training within a Post Graduate Certificate in Education course were positive and responses reflected the importance of them being aware of the psychological reasons behind children's behaviour and understanding children's needs. The trainees focused on the time being used to reflect on their's and others' behaviour. Some trainees felt the lecture should be earlier in the course (not mid-way through); however, we feel for full benefits, school experience and reflection on it is most beneficial. This allows empathy, reassurance and discussion within their community to share common experiences and add to the therapeutic dimension. Other suggestions offered from trainees were having more than one session or having a lecture and seminary mixture style three times a year.

The most memorable aspects of the lecture were that they found the models/theory (e.g. Rogers' core conditions, Maslow's hierarchy of needs, parent-adult-child) useful and strategies to use in their classroom practice. The reasons given for why this was the case was due to their understanding of their own, children and other staff behaviour.

### **Community of Practice**

Discussing their experiences with their peers in the lecture was felt to be beneficial. Comments made by trainees about this were:

- 'I didn't realise others had the same experiences as me'
- 'It made me feel better about how long I was working each day'
- 'It made me realise working outside of school hours is a big part of the profession'
- 'I feel normal now!'
- I felt very stressed through my whole teaching practice and didn't tell anyone in case it made me look weak and like I wasn't coping. It turns out we all felt like that at some point'
- I have considered leaving the course a lot as I felt it was just me not coping and I still want to do things I enjoy as well as teach. I just need to find a way to do it'
- I liked listening to others even though I felt fine throughout'

These comments revealed that discussing their experiences in relation to the lecture content was reassuring and helpful. For some trainee teachers they had not discussed these areas previously so therefore it was a useful communication experience.

### **Second Questionnaire following the Main Teaching Practice**

The second questionnaire followed all trainees' final school placement. Key aspects that were retained and deemed useful during their teaching practice by trainees were categorised under: pupil, personal and informative. Trainees remembered how emotionally vulnerable children and teachers can be; personal comments about work-life balance and looking after myself were made. Information was retained on the child-parent-adult model and understanding causes of anger.

The responses surrounding maintaining a work-life balance were that all of the respondents reported that they had no work-life balance in their opinion.

Trainees were asked to respond to what information from the lecture had changed their everyday practice during their second school experience. The responses were of a qualitative nature therefore data were categorised into the groups: personal, pupils, teaching, staff and informative.

### **Personal**

- I aimed to maintain personal well-being during teaching practice
- I tried to get enough sleep
- In busy times I used a diary to try and get a work-life balance
- Reassurance that it's fine to have time off was useful
- 10 things to look after my well-being was a useful check list

### **Pupils**

- I thought more about my children and that they are more aware than we think
- I considered my children's mental well-being
- If pupils were angry, I considered what may be the cause
- I took time to talk to pupils
- Welcoming pupils to my classroom
- I thought more about my pastoral role

### **Teaching**

- In my teaching I thought about the child/adult/parent state
- How emotional teaching can be on a daily basis – rewarding and stressful
- I was better organised at lesson planning and tried to not spend too much time on one lesson

### **Staff**

- I tried to understand the needs of my emotional colleagues especially if linked to their pupils

### **Informative**

- Maslow's hierarchy of needs was a model I regularly thought about especially if I was very tired or hungry in an evening
- I really liked my school and I think it was because I felt accepted and valued there

It is encouraging that trainees did try to use some of the suggested ideas for sustaining a better work-life balance and think about the use of the models/theory taught during their teaching practice. It seems that for some trainees (due to lower numbers in responses) they could not apply some of the ideas/tools introduced in the lecture to their teaching practice; this may be due to the difficulty of changing their own embedded work patterns and it may take time to develop confidence to be able to take time off or say 'good enough is good enough'. The results do indicate, however, that the lecture was helpful and responses were positive about the lecture

content therefore showing that this type addition is beneficial for trainee teachers to help them develop their well-being.

## **Discussion**

Becoming a teacher is a highly emotional experience (Timostsuk and Ugaste, 2012) and once fully qualified, the profession continues to be busy and demanding. The diary data reported by the trainee teachers highlighted that marking and planning for observations disrupted sleep and eating habits. Busy school days can lead to lunch being missed. The number of additional hours to the school day reported in the diaries that were worked in evenings over the course of a week could be representing those who may 'burnout' very soon as over time this may not be sustainable.

In agreement with Timostsuk and Ugaste (2012) positive emotions were related to pupils: building up pupil relationships, seeing pupils develop and learn. Pupil discipline, ability to cope in the situations presented and issues surrounding the teaching were commented on as negative emotions like Timostsuk and Ugaste's (2012) findings.

Stressful experiences reported related to pupil behaviour, lesson observations and late nights of planning lessons. Putting the situation into a real context is beneficial and if good practice is started during the training year, this is likely to be maintained in a career, and hence the timing of the lecture and the research study to be surrounding the school-based main practice. Reassurance that 'good enough is good enough' (Winnicott, 1965) could be helpful if heard from experts in the field.

Allowing the trainee teachers to discuss their experiences and build up their own 'community of practice' enabled reassurance to be felt and common concerns or difficulties shared were useful to help normalise new practices and understanding. A lecture or workshop approach could be developed further in teacher education programmes as the benefits from sharing experiences is both liked, highly regarded and able to normalise activities that have occurred in school.

Training may help to prevent a proportion of teacher drop-out and burnout; if we understand more about the emotions and demands involved in teaching, especially for trainee teachers (Timostsuk and Ugaste, 2012) we may be able to provide appropriate support. The supportive, lecture style approach described here could be beneficially adopted into teacher training programmes and something similar could be adopted by schools as continued support systems for their staff.

## **Conclusions**

Establishing a well-being equilibrium is difficult to achieve in the teaching profession. Input into a training course and evaluating the impact has shown to be beneficial to

these trainee teachers to instil some key psychological theories, supportive knowledge and pointers to self-manage their life and well-being. Trainee teachers reported that content during their PGCE course on managing their well-being and additional models to promote better understanding of their own emotions and behaviours and those of their pupils was valued and deemed essential.

Self-management of work-life balance and theories which contextualise pupil and staff behaviour were considered important aspects of the lecture. This confirms that this field of information is beneficial and required by trainee teachers. Teacher educators should be encouraged to consider inclusion of this type of material in order to fully prepare trainee teachers for the realities of the profession. This must be a priority area for serious consideration by teacher educators if we value our teachers as being the key resource in raising educational standards.

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