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Psycho-physical theatre practice as embodied learning for young people with learning disabilities

*iJo Trowsdale, University of Warwick and Richard Hayhow, Open Theatre Company, UK

Abstract

In a dominant western tradition that reveres cerebral learning, embodied learning approaches have received limited research attention - and less in education than other disciplines. This paper draws on previously reported empirical data from a five-year Creative Partnerships study to argue that psycho-physical theatre practice can promote embodied cognition, has particular value for young people with learning disabilities ⁱⁱ in special schools and has potential for inclusive education in mainstream schools.

The paper describes a psycho-physical actor training process developed with, and for, actors with learning disabilities. Its application within special educational contexts, which we call 'mimetics', has focussed more keenly upon physicalised interaction as the core communication. In this form of communication, reading, interpreting and responding to the individuality of others happens through the development of non-verbal dialogue. This focus has illuminated the importance of an intuited or 'felt' understanding which is generated by and recognises such communications.

In special education settings, being different is inherent, and physicalised interaction more routine, so ways of working different to the mainstream are required. The paper suggests such settings are rich sites for research to develop, value and recognise the significance of embodied cognition and realise its potential for special and inclusive education.

Kev words

Embodied learning, Non-verbal communication, Drama/Theatre, Learning disability, Special Education, Inclusive education

Introduction

In this paper we examine mimetics, an interactive, non-verbal, psychophysical theatre practice, developed with children and young people with learning disabilities which has demonstrated positive impact in advancing their individual creative learning and communication capabilities (Trowsdale and Hayhow 2013). The practice is called 'mimetics' to reflect the mimetic action at its heart. Through copying and responding to another's physical action, a connection and dialogue is formed non-verbally: a non-verbal conversation is generated and, we propose, learning is stimulated. We draw also upon Wulf's suggestion that mimetic learning is 'a process by which the act of relating to other persons and worlds in a mimetic way leads to an enhancement of one's own world view, action and behaviour' (2008, 56). We trace the roots of mimetics back to the practice of a wide range of 20th century experimental theatre practitioners, and its adaptation through a

decade of drama play, actor training and theatre making with adult actors with a learning disability. The starting point for our examination is a Creative Partnerships study which took place in one special school 2006-11. Whilst our research site was in special education and the findings unique to such a setting, we propose that mimetics might plausibly have value for mainstream education, offering a more level playing field for educational contexts where cognitive competence can isolate some learners.

The authors of this paper are the researcher and theatre practitioner (director of Open Theatre Company) who worked together through this study. Our focus is on expounding the practice developed throughout the period of the study, understanding how it was able to create such impact, and on exploring its potential for wider application in both special and mainstream settings.

Mimetics engages children non-verbally and physically and in so doing engages them emotionally and imaginatively. We propose that the non-verbal, physical interaction and dialogue at the heart of the practice positions the body as the primary form of communication and promotes a form of embodied cognition in all those involved. It also demands reflection-in-action (Schon 1987) by the practitioner moment by moment, in order to engage and respond to the individuality and difference of each child. This reflection-in-action, of necessity, is also pyschophysical in nature and is therefore processed in the moment non-verbally and intuitively through what we have called 'felt understanding' -,an 'intentional attunement' (Gallese 2006) within an embodied exchange which generates tacit understanding (Polyani 1967). Growing interest in embodied cognition research, in philosophy, psychology and neurosciences, suggests that cognitive processes are deeply rooted in how the body interacts with the world. Wilson has noted 'a growing commitment to the idea that the mind must be understood in the context of its relationship to a physical body that interacts with the world... Hence human cognition, rather than being centralized ..., may instead have deep roots in sensorimotor processing.' (Wilson 2002, 625)

The paper closes by exploring the challenges and opportunities in developing embodied learning. We consider the challenge of extending such practice more widely and of robustly representing and evidencing the non-verbal in ways recognised by a dominantly verbal educational system. We consider the potential of visual and dialogic processes in this respect and particularly of underpinning all with capability theory thinking. We conclude by proposing that special schools might offer valuable research sites with both a history of, and further potential for, engaging with developing physical, emotional as well as cognitive skills. This may have particular relevance in England following the Special Educational Needs and Disability (SEND) Code of Practice (DfE 2014) which builds upon an established social disability model, and moves towards what might be considered more of a capability approach, where individual interests and needs are drivers. We propose that mimetics, in enabling embodied cognition will help develop this approach in special education and potentially have a wider application in mainstream school settings.

The initial research study

From 2006-11 Open Theatre Company (OTC) worked with a special school funded through Creative Partnerships, a UK government initiative, to innovate core teaching and learning through long term partnerships between creative professionals and schools. (www.creative-partnerships.com). Special Schools cater for children who are recognised as having 'a disability which prevents or hinders him or her from making use of facilities of a kind generally provided for others of the same age in mainstream schools or mainstream post-16 institutions' (Department for Education DfE 2014, 5).

Across the five years of the project, children aged 3-11 with both moderate and profound learning disabilities were involved, beginning with 7-10 year olds with moderate learning disabilities. Over the last two years, all staff were involved in professional development / training sessions and, with the exception of early years, staff worked directly with a company artist: one hourly session per class, once a week, for at least a year, typically more than one year. Sessions took place outside the usual classroom space.

Termly meetings took place between teachers, OTC theatre practitioners and an external evaluator to review data collected, regarding progress in relation to impact on children's well-being, learning and creative behaviour. Whilst each child had individual targets in relation to these, scores were given for the class overall, informed by qualitative data relating to both collective and individual changes. Here quantitative data were gathered using a four point likert scale (no change, some change, noticeable change, significant change). Findings from years one and two generated research interest in how to enable staff to extend and use this theatre-based practice to benefit children. Staff trialled different ways of evidencing progress: visual, written and dialogic. In year one this was written, observation-based, profiles for individual children. In year two this was supported by photographs and by children completing emotion icons in response to sessions. Changes in school structure meant that the year three and four planned developments with staff already aware of the work had instead to be redirected to newly employed staff and students. But increasingly use of still and video cameras to capture moments became common practice. In the final year three additions were made. Firstly children reviewed and selected particular photos as evidence of progress against their personal communication, cognitive or development targets in individual profile books. In this respect staff worked from children's choice of what images and words should mark their growing capabilities (Lewis and Porter 2004, Marchant and Cross 2002, Grove et al 1999). Secondly, three children, one with learning disabilities, one with physical and learning disabilities and one with complex needs (describing the range of population in the school) were tracked. Thirdly staff were invited to record 'significant moments', similar to Flanaghan's 'critical incidents' (1954) both within and outside sessions to encourage sharing and explaining moments of impact they recognised for individual children.

The practice: 'Mimetics'

Weekly sessions were led by OTC's main theatre practitioner, sometimes with support from a number of actors with a learning disability acting as peer facilitators.

Sessions are held in an empty space set only with a circle of chairs, so that everyone can see each other. As the children enter the room, music – playful in character – creates a mood and stimulates bodily engagement. Sessions begin with a physicalised invitation to copy actions, initiated by the theatre practitioner, who becomes immediately responsive and dialogic the moment a child engages in the activity. The practitioner makes eye contact and perhaps exaggerates as he copies to communicate a connection with the child. In this space a child can copy, be copied, offer their own response, itself a new idea, with no account or verbal explanation needed. As the body is liberated, emotions and imagination are stimulated. In this way, the 'stage is set' for direct and immediate interaction between the practitioner and the children. For example whilst copying the practitioner as he mimes stepping carefully across a bridge, one child explores the suggested pretence of imbalance, initiating the feeling of nervousness. The child reaches suddenly for the practitioner who becomes imbalanced, but together they cross to imagined solid ground. Here the physical imbalance and regaining of balance constitutes a shared experience of anxiety and reassurance building an emotional connection in action.

So as the session moves from exercise into imagined contexts the children are engaging in simple, non-verbal story telling. The practitioner suggests a possible sequence of actions and response as the starting-point for a narrative; this is then repeated and reinvented with different participants, in individualised ways. For example to a soundtrack of mournful music an OTC actor enters in the character of the 'sad clown'. The theatre practitioner then explores approaches to try and cheer the clown up. All witness the sequence and gather ideas. As different children are invited to engage with the clown, laughter, 'ooh' and 'ah' sounds signal recognition of ideas tried. One child approaches directly, smiling and waving but the clown's expression remains the same. Another circles, watching, then turns to the clown, first copying the sad face and then smiling until the clown starts to copy and smiles.

Pre-recorded music is the main structuring process for the narrative and helps to keep a focus upon bodily and emotional response, create atmosphere and sustain engagement from all present in the room.. Children have opportunity to play (to explore), pretend (to imagine what it might be like to be in someone else's shoes) and perform (being conscious of others watching and witnessing), sometimes communally as a chorus, sometimes individually 'taking the stage'. Such moments might be invited by an adult or requested by a child, but always the witnessing fellows become part of the communication, learning mimetically from each other's engagement and expression. Witnessing how another child chooses to interpret in imitation expands the repertoire of possibilities for everyone. Progressively they build up a shared 'narrative' as children's contributions are echoed, affirmed and developed by each other, so that the developed story becomes part of the 'language' of the group. Children create dialogue and interaction non-verbally, testing out possible scenarios, roles and their associated feelings for themselves — developing their capabilities.

Impact

Over the five years of this project, the children involved demonstrated enjoyment, improved communication skills, socialisation and progress in relation to

creative and individual cognitive and developmental targets. Staff, parents and the students all acknowledged progress. Staff typically scored changes in behaviour as 'significant', occasionally as 'noticeable', i.e. the two top ratings on a four point likert scale. This scoring related to 'engagement', 'collaboration' 'risk-taking' and 'developing new skills and ideas'. This data and qualitative accounts supporting the analyses have been reported previously (Trowsdale and Hayhow 2013).

Children said they were 'not so scared' or had 'got braver'. They recognised that they were learning new skills: 'he teaches us to listen' or 'to work together'. Staff likewise noted children 'hav[ing] different ways of communicating with other children and also with adults' resulting in them developing 'new skills of collaboration and interest in other people' and 'supporting each other more'. Incidents were reported such as collaborative and imaginative play during break times and the emergence of humour between children. Children demonstrated greater readiness to persevere with solving simple problems alone and with other children; and tolerated changes to their routines better. In learning situations imagined contexts were successfully used by some teachers to engage children in understanding mathematical concepts of addition, subtraction and multiplication. One teacher used the idea of imagining apples on a tree and some falling in the wind to explore subtraction. Improvements in communication or literacy attainment were noted for many children.

These gradual changes were marked by a series of 'significant moments', of non-verbal communication, witnessed, experienced and acknowledged by child and adult together; moments when understanding was 'felt' and impact was recognised. For example a child, who had previously averted his eyes whenever the theatre practitioner had sought his gaze, came into the space at the start of a session, deliberately sought and sustained eye contact with him for an extended period of time before taking his place to start the session. Another with sensory sensitivities who had initially screamed at the music, danced to it, using a scarf (which had been offered as a prop in a previous scenario) as his partner. The practitioner recalls a greeting with one of the children after a holiday period. He said 'Lovely to see you Robert' to which Robert, whilst squaring up to look straight at him, replied 'And it's lovely to see you too Richard'. In the moment they simultaneously experienced the truth of the communication. It was 'felt' in a moment. It marked the recognition of the transformation of a child who had who entered the school as an angry, isolated and underachieving child, but a few years on was easily achieving all of his learning targets (cognition, communication and physical). Indeed his final profile was full of images of joyful play, supporting those more vulnerable, and challenging those who were stronger, but absolutely ready for and pro-active as a social learner. The moment was recognition of a changed behaviour through attunement to another.

Psycho-physical theatre: the roots of mimetic practice

The application of theatre, and actor training processes, for purposes other than the stage is well known, whether in schools, health settings, business, law or society (Pendergast and Saxton, 2010). Drawing upon the work of Boal (1979), drama in education practitioners have employed the dramatic conventions of theatre to foster understanding of human dilemmas, exploring imagined alternatives (Neelands and Goode 2000). Here, 'in the shoes of' another, a child or whole groups of children

might imaginatively project themselves into another's experience, testing the consequences and implications of particular courses of action through particular theatre techniques such as forum theatre. Drama in education explores areas of human experience and is structured, at least in part, to realise predetermined learning objectives through the ensemble. Whilst mimetics likewise uses ensemble, it is a differently structured process. It uses physical interaction to activate, explore and develop as yet unknown human capacities, ways of being and learning. Learning may well also be negotiated and objectives adapted in the process of a drama lesson, but this is intrinsic to the process in mimetics.

Although not a well-documented aspect, psycho-physical theatre practitioners have also described the development of human capacities through physical action as a dimension, albeit a by-product, of the work. For example, Chaikin says

Each role, each work, each performance changes us as persons... as the actor advances through the progress of the work, the person is transformed. Through the working process which he himself guides, the actor recreates himself. Nothing less. (Chaikin cited in Hodge 2010,164)

Psycho-physical theatre practice draws upon the work of a range of European and American theatre practitioners who have experimented with both 'psychological' and 'social' actor-training methodologies which mine 'the relationship between physical stimuli and the resulting sensory and mental states' (Kalin 2007, 6). These are rooted respectively in the work of Stanislavski and Meyerhold (Hodge 2010). As Hodge notes, these apparently different approaches contain aspects of each other and the emphasis in both is clearly upon theories concerning the mind/body dynamic which remains a continuous source of investigation for all actor training practitioners. As for Stanislavski, in mimetics, physical action stimulates the emotions and the imagination. Educationally, the closest connection might be Steiner whose belief in eurythmy, a gymnastics based performance art, suggested the need for training of the body to express and develop the mind (Steiner 1923)

Schechner has talked of the physical act of performing as a discovery or self-awareness process so that the actor,

in personal terms, is "me behaving as if I am someone else" or "as if I am 'beside myself,' or 'not myself,'" as when in trance. But this "someone else" may also be "me in another state of feeling/being," as if there were multiple "me's" in each person. The difference between performing myself—acting out a dream, reexperiencing a childhood trauma, showing you what I did yesterday—and more formal "presentations of self" (1985, 37)

Here, the actor is not 'in the shoes of ' another specific person but is exploring and extending his sense of self to include other possible selves or other potential ways of being. Schechner's notion of 'multiple selves' co-existing is how performance 'activates alternatives' (Ibid p.6). Through interaction with the actor trainer and, also with an ensemble of other actors, the actor explores her/his multiple selves. Here ensemble as a context and theatre as a medium open up other possible ways of being. The exclusive reliance on physicality and non-verbal is what distinguishes mimetics from applied drama and many forms of drama in education which are perhaps more rooted in the verbal and conceptual. This is reminiscent of Maslow's psychological of

self-actualisation which suggests that through interactive behaviour like laughing, empathising, being less inhibited and more 'spontaneous and expressive [and]... open to experience' (Maslow 1974, 109) a person may 'become more and more what one is, ... capable of becoming' (Maslow 1943, 383).

Applying psycho-physical theatre for actors with learning disabilities

Working with his company of actors with learning disabilities, OTC director drew upon psycho-physical, ensemble theatre practice for its ability to engage theatrically untrained individuals in expressing ideas and feelings in ways unique and appropriate to them. The centrality of an 'open and organic' ensemble practice was equally necessary to generate the authenticity which connects actor and trainer, actor and actor, actor and spectator and inner impulse to outer action. Echoing wider practice in Disability Arts, the process began from 'the abilities of the individual', working to enable the actor to feel safe enough to engage and become 'emotionally generous and responsive [to the] collaborative [theatre] process' (Palmer and Hayhow 2010, 59) and express fully through the body. The focus on the body, in reducing the cognitive demands which typically differentiate learners in mainstream, proposes a more equalising medium for communication. It also recognises individual capabilities - an 'affirmative' rather than purely social model of disability (Swain and French 2000). Implicit in the notion of disability is a 'sense of difference from a centre' (Kuppers 2003, 5) and more crucially of people who 'can't' as opposed to people who 'can'. 'The act of naming someone "disabled" can ...undercut any answering back: one of the definitions of disability is focused on a lack of agency' (ibid). The move away from words and into the body gives back agency to the actors with learning disability as the body becomes a more effective medium of interaction for them. No longer do they have to sit back and let the world happen to them: they can engage in it and have an impact on it. In this respect, the psycho-physical theatre practice enables the agency of the actor and fosters greater collaboration in the creative process

The collaborative process in which 'me and not-me' are explored through a range of non-verbal 'languages' therefore empowered the actors with learning disabilities to make their own meanings, and shape their own forms - to create from within their imagined contexts. The psycho-physical training methods validated the uniqueness of each individual. This point is noted by Karafistan who, in discussing the company's theatre practice, said 'their disabilities actively inform their creativity' so it is central to the work 'to keep them different' (2004, 265). A fellow Polish actor experienced with working with actors with learning disabilities recognised their 'ability to straddle the borders between imagination and reality more effectively and honestly than "ordinary" actors' (Ibid, 267). The work with actors with learning disabilities drew upon and extended the inherently embodied nature of psychophysical theatre through a purposeful emphasis on both the non-verbal and on difference.

A working process in which an actor 'himself guides' his training, (Chaikin cited in Hodge 2010, 164) began, of necessity, when working with untrained actors with learning disabilities, to develop into one which the director and actor jointly guided, through non-verbal interaction. Director and actor worked together to explore the actor's possibilities, to facilitate more fully his or her creative potential. The

director's non-verbal physical interaction with the actors became the basis of transmission of the training process: an intuited reflection-in-action guided this interaction and became a necessary skill-base for the director. Embodied cognition research might describe this facilitation process as 'intentional attunement' (Gallese 2006) in which the body provides a reference point of 'shared understanding ... a common ground from which we can communicate with each other' (Rambusch and Ziemke 2005: 1807). Here was the foundation of 'felt' interpretation and 'felt' response as a *modus operandi* which would have profound implications for the development of the work in educational settings, where the term 'felt understanding' first began to be used to discuss how significant developments and learning were happening.

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Understanding 'felt understanding'?

Several theories exist around the idea of 'felt understanding' as a state. It is allied to Polanyi's (1967) notion of 'tacit knowledge', a 'pre-logical phase of knowing' informed by personal passions and involving a range of images and sensory information which help us in making sense of something. More recently some psychologists have used the term to intimate the understandings generated through tacit awareness of social relationships and their impact upon well-being (Oishi, Krochik, and Akimoto 2010). There are also similarities in the phenomenon described, albeit not exactly in these terms by neuroscientist Damasio (2000) who describes 'the feeling of knowing' as a 'level up' from simply feeling, involving some reflective cognition of feeling – a knowing of feeling in effect. Meyers (2004) has spoken of 'immediate insight' as a kind of felt knowing. Intuition is often described as a 'gut feeling' or an 'understanding ... without conscious recourse to thought, observation or reason' (Gallate and Keen 2007). So that 'often, we act on "good" and "reliable" information somehow stored in our nervous system that we are consciously unaware of knowing completely' (Gallate and Keen in Runco and Pritzker, 2011, 688).

In most of these examples, feeling and sense-making is an individual experience or state, typically internalised by the individual and thus one-way. There is, in the work of Oishi, Krochik and Akimoto, an awareness of a community who experience 'felt understanding', but the focus here is still upon what this state illuminates for the individuals, rather than responding to 'unconscious cues or implicitly apprehended prior learning' (Gallate and Keen 2007) as part of a live process of shaping and feeling a particular understanding in a particular moment.

Here felt understanding describes a *dynamic – and embodied -* process of interpreting meaning within any non-verbal human interaction and of simultaneously enabling or generating an appropriate response to it. Unlike the examples above, it is dialogic. As well as a 'felt' interpretation there is also an instantaneous 'felt' response which will in turn be felt and inform the next response. Some people may be more

attuned to and perceptive about such communications, but all humans experience this at some level on an almost daily basis. In the account below of pyscho-physical theatre practice, Merlin describes the interaction of two actors in rehearsal dialogically feeling and responding.

First of all I 'inhale' my partner's action, in an 'absorption of experiences'. In a pause – spilt second or momentarily sustained – I assimilate the information. This assimilation (or inner reaction) will provoke one of my inner motive forces. It might be an impulsive reaction, or set me thinking, or I might be instantly amused or distressed. Based on what was most proactive in my reaction I 'exhale' my resultant decision, an expression of self. ... this usually happens instantaneously (Merlin 2001, 53)

In its simplest form, felt understanding is the instinctive, split second recognition, interpretation and response process that enables effective, communication/dialogue in daily life. There is no attempt to verbalise the felt understanding either at all or at least until after the event, in a mode of 'reflection-onaction'. But a richer 'felt understanding', of the kind outlined by Merlin, describes a dynamic, multi-faceted meaning-making process, which is instant and rooted in the totality of what is felt in that instant. Theatre's plasticity gives rise to the ability to play with and illuminate human experience and thus provides a context for more skilled attunement to others and the generation of a complex and holistic web of nonverbal interactions which can be processed effectively through rich felt understanding. It is at once a communication and a reflection process. So in this mimetic practice, the practitioner's mimetic physical response to a child's offered action, is an 'exhalation', rich with affirmation of the personality, capability and interest the child has communicated. Mirror neuron theory proposes that there is a 'fundamental biological basis for understanding another' because copying or connecting with the actions of another generates a 'shared activation' (Gallese, Eagle and Mirone 2007, 131). Whilst the correlation of mirror neuron dysfunction with problems in empathy and social cognition is still under debate (Wilson 2010, Bernier and Dawson 2008), the notion that observed facial expression amongst those interacting can induce the feelings associated with the expression has wide support (Rizzolatti, Sinigaglia and Anderson 2007; Niedenthal 2007; Iacobinni 2008).

An experience of felt understanding such as that described in mimetics seems to concur with this notion and in fact broadens the debate into asserting body as well as facial expression as capable of inducing those feelings associated with it. . Mimetics relies heavily upon this complex level of felt understanding: and as such it is a 'rich' as opposed to 'simple' version, and requires conscious development. The distinguishing feature of rich felt understanding is the *intention* and *skill* to process and almost simultaneously respond to a complex web of non-verbal interactions so that felt understanding becomes the primary means of negotiating the semiotics of non-verbal communications.

Challenges and Opportunities

The significant effects of mimetics for young people in special school created the impetus to investigate and analyse it in the way we have articulated so far. This final section will explore the issues involved with developing mimetics further in special schools and beyond. Firstly we will consider the issue of recognising the form of mimetics and the kind of language which might enable it to be discussed, and ways in which teachers could be encouraged to take on elements of the practice. Secondly we will consider the challenge of effectively evidencing mimetics. Against these challenges, we will also explore the potential value of mimetics in supporting schools to realise the new UK SEND code of practice, developing capability theory based approaches to learning and of the particular role that special schools might play in leading research which might popularise mimetics as an embodied and inclusive mode of learning applicable to mainstream settings as well.

Challenges

Our experience of engaging staff in the special school in this practice highlighted the need to develop a verbal language for mimetics to help promote an understanding of mimetics and its potential impacts. For example, the notions of 'playing', 'pretending' and 'performing' were proposed to staff as labels for different learning behaviours. These gave confidence to some staff to feel they knew how to observe more closely and thus could engage more. This was not, however, a universal success. The language was imported from child development and theatre and as such the terms did not have resonance - either as being co-constructed or as educationally recognised terms. This signaled the need for a language which might translate across education and theatre, to talk about the type of engagement mimetics can facilitate.

In our research, we recorded varied responses from staff in sessions: some were fully engaged, actively seeking to hone their own non-verbal attunement as they witnessed firsthand the impact of the work. Others supported and could, when asked, recognise positive effect, but found it hard to engage in such embodied practice. And some appeared unsympathetic and to have limited recognition of what others saw happening. From responses at professional development sessions it appeared that a lack of familiarity with embodied practice may have generated discomfort with embodied cognition and felt understanding. This would not be surprising as the body is not the dominant medium recognised in education for developing and recognising progress in learning. To 'normalise' embodied learning, practitioners need the opportunity to train in and practice 'knowing-in-action' within sessions, informed by collaborative post session 'reflection-on-action' (Schon 1987) through which unexpected results can be explored and recognised.

Recognising the challenge of language and of embodied practice also highlighted the differences between embedded planning processes in education and this form of theatre in education. Planning for mimetics tends to involve 'oblique' (Kay 2010) approaches, with clarity about next steps emerging responsively over time (within and between sessions) so that initial open approaches allow for a multiplicity of ways in which people might receive, respond to and thus reconstruct new meanings of their own. This is not to say that intention is any less of a driver in mimetics than in more formally accounted planning, but that accountability tied to pursuing particular aims, in a way which closes the opportunity for others to be recognised is resisted.

A significant challenge also lies in evidencing a physical and non-verbal form. For example, playing music used previously to start a session acts as attunement and triggers a recollection of what happened before. Consequently when an action is also

offered it might signify 'do you remember when we did....?' or 'what value did that have for you? Can you show me / help me see where to take it next?' But verbal translation of this kind is time intensive, subjective and possibly ineffective; verbalising falls short of intuitive knowing within the moment. When we invited staff to briefly log any 'significant moments', it was a small number of teachers and some teaching assistants who engaged: those who were confident in their attunement, their experience of a felt understanding moment and in writing. Film, photography and other new technologies were often the preferred media of these staff for recording evidence. The fact that other special schools have adopted such visually based practices, using their own development markers, signals that there may be growing recognition for using embodied behaviour as evidence of learning development. A blended approach involving a variety of evidencing methods might prove both efficacious and also feed the attunement and embodied practice of staff.

For mimetics to develop, investment to develop greater understanding of its practice and purposes and greater familiarity with, and training in, the embodied nature of the form would be needed. It would need to generate a negotiated language which respected both the character of the theatre form and the demands of educational accountability. It would also need to begin with evidence of how the elements of the practice combine. Films made used at seminars and events in complement to demonstrations seem to be a good starting point (http://www.opentheatre.co.uk).

Opportunities

The site of the original study appears to have been significant to our research and suggests opportunities for further exploration. Like all special schools in England, it operates within a dominant social disability frame, providing educational support to individuals 'in need' of support in their development (DfE 2014a, DfE 2001). Reviewing physical development needs forms a natural part of designing a programme for a child and thereby the relationship between physical, emotional and cognitive is perhaps more visible and acknowledged in such settings. At the time of our study this particular UK special school was in the process of encouraging a focus on greater interaction and dialogue between children and staff in relation to a collaboratively constructed understanding of each child's individual development needs and how individual progress might be recognised. In effect the school was seeking to 'foreground the basic heterogeneity of human beings' which Walker and Underhalter suggest is the 'fundamental quality' of the capability approach (2010,9). By attuning staff to the significance of their agency and of their role in enabling each child's own agency they might better ensure that children have 'real opportunit[y] to do and be what they have reason to value' (Robeyns 2011)., 9) Terzi asserts that 'more than other perspectives, [the capability approach] places a specific emphasis on [the] intrinsic value [of education]' (2005, 218) because whilst 'expanding capabilities, education plays a very important role in promoting the future freedoms children will have to choose their valued beings and doing' (Ibid: 219)

A capability approach appears also to have been enshrined in the recently revised English SEND Code of Practice (DfE 2014), It proposes that the needs and progress of children with learning difficulties and disabilities are assessed across a combination of dimensions: communication and interaction; cognition and learning;

social emotional and mental health difficulties; sensory and / or physical needs (DfE 2014a: paragraph 6.28-6.35). Progress of children in special schools is often recorded using assessment frameworks (such as the P levels) as well as locally developed frames for the dimensions mentioned above. So whilst, like all English schools, special schools are accountable to standardised testing and accountability measures, legislated through government and inspected through Office for Standards in Education (Ofsted), they are also encouraged to 'include progress in areas other than attainment - for instance ... social needs' (DfE 2014, 10). Schools are advised to develop markers: 'It is for schools to determine their own approach to record keeping' (DfE 2014a paragraph 6.72). This recent legislation suggests that the position of special schools has been strengthened, inviting them to validate and build on what pioneering approaches they might already be using and which might more effectively realise a capability approach. The new SEND Code of Practice (2014a) emphasises that 'the purpose of identification is to work out what action the school needs to take, not to fit a pupil into a category' and that schools should recognise the intersectionality of 'needs that cut across ... and ... may change over time', ensuring that 'support provided to an individual should always be based on a full understanding of their particular strengths and needs' (Ibid paragraph 6.27 – my italics). The SEND Code also advises that schools begins a 'focus on the child's or young person's own aspirations, interests and needs' ... 'from the earliest years' (DfE 2014, 10).

In this context mimetics might offer a real opportunity to recognise and fortify capabilities, build on strengths and promote a shared visually based documentation process in which the child has 'voice'. Children with learning disabilities are often separated from interaction through their disability. Children with autism, for instance, are described as operating in separate but 'parallel worlds' (Bogdashina 2010). For such children being invited to explore 'me in another state of being / feeling' (Schechner 1985), through theatre play and imagined contexts drawn from their individuality and life experiences, means that their world view is visible to and potentially valued by others. So disability becomes a heightened ability which feeds communication: the preferences and world view of the 'disabled' child may enrich the experience and in turn affirm the child.

Finally, further research into embodied cognition could enrich our understanding of the impact of the work. The argument for developing embodied cognition has intensified due to recent developments in neuroscience. Argyle's pioneering work in social psychology argued for the superiority of non-verbal communication: that humans process understanding non verbally quicker and with more meaning than with words, (Argyle et al 1970). Jacob et al have suggested that 'the ability to understand emotions, was positively correlated with the tendency to base emotional judgments on non-verbal emotional signals' (2013, 797). Whilst Jacob researched developmentally 'normal' students, Norbury et al observed similar nonverbal behaviour in young people diagnosed with autism, using a study of eye movement patterns when watching videos of peers interacting (2009). Whilst those with autism and language impairment took longer to fixate eyes, overall all young people with autism attended eyes and mouths equally. 'We hypothesised that as social impairments characterise all individuals with ASD, both groups would show reduced fixations to eyes. However, this was not the case.' (Ibid, 839). In fact the only clear difference between typically developing teenagers and those with autism was that those with autism *and* a language impairment took longer to fixate eyes. Norbert et al were surprised not just by the typical viewing patterns of young people with autism of dynamic social stimuli but especially by the amount of variation *within each* group. Both of these findings point to the significance firstly, of dynamic social situations such as those inherent in mimetics that stimulate response in people of *all kinds of abilities* and secondly, of individuality and difference: across special and mainstream contexts. So whilst non-verbal communication is more trustworthy across 'difference' because it does not assume a knowledge of or need for social codes, but can be learnt through interaction (Timimi, Gardner and McCabe 2011; Caldwell 2007), the argument for physical action as integral to the ability to think, process and connect meaning is not limited to learning disability. Indeed many argue that we all need to move to think (Claxton, Lucas and Webster 2010; Evans, Davies and Rich 2009; .Goldin-Meadow, Wein and Chang 2009); to see and feel to understand (Goleman 1996). We advance mimetics as a practice which has potential to hone such interaction and communicative development across special and mainstream settings.

Conclusion

This paper suggests that there is a deep connection between psycho-physical theatre practice and human development within the territory of embodied cognition. It proposes that when this practice is undertaken within special educational settings it has significant impact on learning for young people with learning disabilities and could have value more widely across education. Established researchers in learning disability suggest that there is much to be learnt from the non-verbal as an 'integral part of the co-construction of the encounter' (Lewis 2010, 18-19). In mainstream language is recognised as a different communication mode which 'inevitably reduces the complexity of the experience' (Music 2011; 100) and that social and collaborative learning require non-verbal interaction (Claxton, Lucas and Webster 2010, 55). Further research is required into how we can better recognise and represent non-verbal ways of knowing such as 'felt understanding' in order that we honour and expand the capabilities for young people with learning disabilities.

Whilst special schools work with and provide evidence in relation to legislated normative markers of progress for each unique student, they also simultaneously prioritise the development of individual capabilities and offer great flexibility in approaches to learning. Recent legislation in England has heightened the need for innovating ways of recognising and recording progress. As such, special schools appear to be uniquely placed as sites to research and develop embodied learning practices. Staff in special schools are well positioned to co-research into the value of embodied learning and how to robustly evidence it, being attuned to respond to very different needs, interests and abilities. They have opportunity to develop more personalised, dialogic and embodied ways of enabling and recognising development. With the support of practitioners skilled in embodied learning and researchers focused upon representing progress, a critical mass of evidence might be developed through special schools to improve our practice for and with young people with learning disabilities.

It may also be that their findings are significant for innovating mainstream practice with regard to embodied learning as an inclusive process. Following a sociological or capability perspective on disability we might advance that rather than

considering people as 'thinkers', we might all instead be considered as 'emotional, intuitive human beings for whom reflective thought may channel intuitions' (Ignatow 2007, 126). Research to support the growth of such habits might have significant implications for mimetics well beyond special schools.

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i * Corresponding author jo.trowsdale@warwick.ac.uk

ⁱⁱ Our use of the term learning disability is intended to distinguish it from the notion of learning difficulty. 'Learning difficulty' has historically been used to address needs addressed in mainstream schooling and equates best to the internationally understood term 'intellectual disability'. Legislation in England has connected these ideas defining Special Educational Needs as a 'learning difficulty or

disability [which] calls for special educational provision, namely provision different from or additional to that normally available to pupils of the same age' (DfE 2014)