Educational Psychology Research and Practice
Volume 5, Issue 2, 2019

Educational Psychologists as Scientist Practitioners: A Critical Synthesis of Existing Professional Frameworks by a Consciously Incompetent Trainee

Dr Adrienne Sedgwick
Educational Psychologist, Bradford Local Authority

Several professional frameworks have been developed that provide mechanisms to support the application of psychology to problem-solving; thus facilitating the role of educational psychologists as scientist–practitioners. Furthermore, existing frameworks do not have to be viewed in isolation and can be integrated to demonstrate effective and defensible professional standards (Kelly & Marks Woolfson, 2017). This paper is a reflection on practice written by a third-year trainee from Manchester University. It aims to critique five existing frameworks, through casework analysis, and critically synthesise findings to produce a personalised framework based on "what works". A theoretical model, "The Model of Dynamic Epistemology" (MODE) and a framework to support the application of MODE has been suggested. The paper concludes that an effective professional framework must emphasise positive relationships and shared understanding while maintaining scientific rigour. Finally, limitations have been outlined and future action research into the effect of MODE recommended.

Keywords: Trainee educational psychologist (TEP), The Division of Educational and Child Psychologist's Framework for Psychological Assessment and Intervention (DECP model), Interactive Factors Framework (IFF), The Constructionist Model of Informed and Reasoned Action (COMOIRA), The Monsen Model, Activity Theory

Introduction

The term "scientist–practitioner" suggests a dual role between research and its application in the real world. There are, however, difficulties with integrating science and practice within a single model due to different priorities. More specifically, scientific knowledge is concerned with rigour, objectivity and generalisability, while practical knowledge is subjective, holistic and has to pertain to individuals (Lane & Corrie, 2007). Nevertheless, Stoltenberg et al. (2000) suggest a competent applied psychologist requires an integrated approach to knowledge. More specifically, this relates to evaluating practice and conducting personal action research as a precursor to accessing and using published research in an informed and reasoned way.

Several professional frameworks have been developed to underpin the role of educational psychologists (EPs) as scientist–practitioners. For clarification, when using the term "framework", this paper will be referring to a specific structure or series of actions that facilitate the application of theoretical models into practice (Kelly, 2017). There are two main types, executive frameworks are process related and can be applied to any area of EP work (Wicks, 2013), whereas practice frameworks support the application of specific psychological theories (Kelly, 2008). Adopting a systematic approach through the implementation of frameworks allows EPs to identify needs, clarify objectives and evaluate outcomes effectively. Furthermore, analysing data from single cases situated in complex settings, using the rigorous processes provided by frameworks, may result in generalisable knowledge of effective interventions (Miller & Frederickson, 2006).

EPs are advised to adopt an ideographic approach to their role as scientist–practitioner (Miller & Frederickson, 2006). Also, Kelly and Marks Woolfson (2017) argue that the available frameworks do not have to be viewed in isolation and can be integrated to demonstrate effective and defensible professional standards. Therefore, the primary aim of this paper is the critique of existing frameworks, by a trainee educational psychologist (TEP), and critical synthesis has resulted in a personalised framework based on what works. The secondary aim of this paper is to ensure that this framework applies psychology that is relevant and accessible to a range of stakeholders. This is because the EP's role may not always be clear to service-users (Birch, Frederickson, & Miller, 2015).

The following frameworks have been implemented via four casework analyses, which were required for the completion of the Doctorate in Educational and Child Psychology:

- the Division of Educational and Child Psychologist's Framework for Psychological Assessment and Intervention (DECP model) (British Psychological Society, Division of Educational and Child Psychology, 1999);
- Interactive Factors Framework (IFF) (Frederickson & Cline, 2002);
- the Constructionist Model of Informed and Reasoned Action (COMOIRA) (Gameson, Rhydderch, Ellis, & Carroll, 2003);
- the Monsen Model (Monsen & Frederickson, 2008); and
- Activity Theory (Engeström, 1987).

Table 1 outlines the details of each casework analysis (CWA).

Table 1

Summary of Casework Analyses

Assignment brief for CWA	Description of client	Purpose of TEP involvement	Stage of TEP development	Framework(s) applied
CWA 1: Focus on assessment and intervention planning through application of the DECP.	Y4 child presenting with specific literacy difficulties.	Assess to suggest possible causation and provide advice regarding quality first teaching and targeted support.	Year 1; semester 1.	DECP IFF
CWA 2: Focus on a therapeutic case through application of COMOIRA.	Y7 child presenting with behaviour difficulties.	Assess to suggest possible causation and reasonable adjustments. Provide a therapeutic intervention.	Year 1; semester 2.	COMOIRA IFF
CWA 3: Focus on a child development case through application of the Monsen Model **or** the Integrated Framework.	Y6 child operating five years below age-related expectations.	Provide advice for a statutory assessment and support with transition to secondary school.	Year 2; semester 1.	Monsen Model IFF
CWA 4: Focus on an early years or post-16 transition through the application of Activity Theory.	Y13 young person with autism diagnosis.	Provide advice regarding post-16 pathways and transition processes.	Year 2; semester 2.	Activity Theory

This paper provides a critique of each framework before critically synthesising findings to present a theoretical model and an executive framework designed to bridge the gap between the suggested model and the applied context. Please note, the primary frameworks under consideration were preselected for the author via the assignment briefs provided by the university. The IFF has been incorporated as a secondary framework, where relevant, as the author has found it to be a useful visual aid in facilitating a shared understanding with a range of service-users.

Critique of the DECP Model

The DECP model is shown in Figure 1. Despite being called a model, it is an example of an executive framework, because it can be applied to any area of practice, at any organisational level and does not prescribe the methodology or theory that should be employed (Wicks, 2013). The author, as an inexperienced, "consciously incompetent" TEP ((Burch, 1970, as cited in Spool, 2011), found it an invaluable tool to help appraise and refine skills. However, it is unclear whether the positive impact was explicitly due to the DECP model, because, at the time, she was at an early stage of professional development.

Most Useful Aspects of the DECP Model

The DECP model is driven by the consideration of evidence to inform the selection of interventions and the evaluation of their impact. Therefore, it fits within the cycle of assess–plan–do–review (APDR) as recommended by the Special Educational Needs and Disabilities Code of Practice (SEND CoP) (Department for Education [DfE], Department for Health [DH], 2014). This is useful because the process should be familiar to professionals working in schools, allowing the application of psychology in an accessible way. Another strength of the DECP model is that it poses specific questions, at critical points during casework, to promote the synthesis of available information to support next steps. For example, when applied to CWA 1:

- What data should be gathered? — This was clarified via consultation with key stakeholders and by assessing specific cognitive, affective and personal/social factors that may have impacted on learning. This led to the generation of initial hypotheses.
- How should the data be analysed? — The strength of evidence was considered and triangulated with other data sources to revise the initial hypotheses.
- How can research be integrated into the chosen interventions? — The evidence base was consulted when devising intervention plans. For example, an understanding of Direct Instruction when considering quality first teaching (Engelmann, Becker, Carnine, & Gersten, 1988) and strategies such as precision teaching for targeted support (Downer, 2007).
- How can the evaluation of outcomes link back to the problem definition? — It was not possible to evaluate outcomes and link them back to the original hypotheses, because the author's placement came to an end. However, application of the DECP model resulted in an appreciation that this is an iterative process, requiring review and refinement over time. This led to the realisation that empowering teaching professionals to do this for themselves is a core TEP function.

Least Useful Aspects of the DECP Model

Although the DECP model considers the child within context, by specifying the terms "ethics", "equality of opportunity", "politics" and "values", it does not suggest mechanisms for doing this. Furthermore, there is a dichotomy between its core, which advocates a solution-orientated "focus for change", and the discourse surrounding "problem definition", which favours a deficit model. This inconsistency may be due to the absence of specific and clear psychological principles that are typical of an executive framework. An emphasis on process above theory resulted in the author not always appreciating the reasons behind her actions. However, another plausible explanation was a lack of experience at the time. Nonetheless, this highlights the importance of a clear methodology and a description of the theory that underpins it when creating a framework for TEPs.

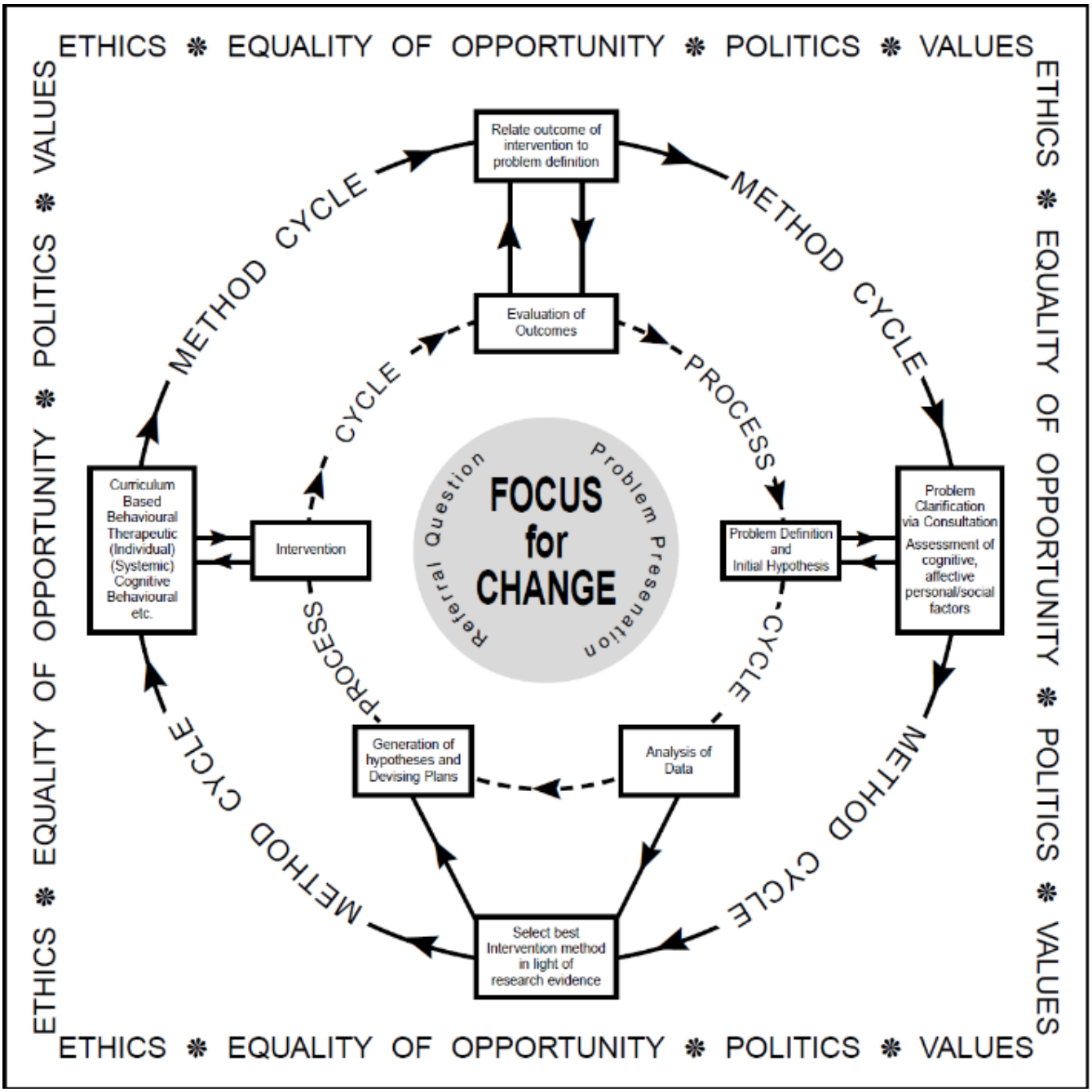
The IFF, therefore, proved to be an invaluable tool to fill this gap because it highlights the importance of considering biological, behavioural, cognitive and affective development and how they interact with the environment. This encourages a broader appreciation of multiple hypotheses and greater depth and breadth of assessment (Wicks, 2013). Adopting a holistic approach enabled the author to see that the problems in CWA 1 could potentially be linked. It was, therefore, the IFF that led to the hypothesis that an unidentified developmental language disorder was the precursor to the specific literacy difficulties.

Finally, positive outcomes are more likely to occur when all relevant people collaborate to reach a shared understanding (Gameson & Rhydderch, 2017) and this is not made explicit in the DECP model. An absence of co-construction in

Figure 1

DECP Framework for Psychological Assessment and Intervention

From "Professional practice guidelines," by the Division of Educational and Child Psychology, 2002, p. 27. Copyright 2002 by British Psychological Society. Reprinted with permission.



CWA 1 led to the class teacher commenting that some of the suggested strategies were already in place, which could lead to poor relationships with service-users.

In summary, the DECP model provided a useful scaffold but did not emphasise the importance of building relationships and establishing a shared understanding.

Critique of COMOIRA

COMOIRA is shown in Figure 2. At its centre, it has a set of core principles, which inform eight key decision points. It is questionable whether COMOIRA is another example of an executive framework as it is described as such by Wicks (2013) but not by Kelly and Marks Woolfson (2017). It could be argued, however, that COMOIRA is a hybrid executive/practice framework. This is because, like executive frameworks, it is process related and can be applied to any area of practice at an individual, systemic or organisational level (Wicks, 2013). However, in common with practice frameworks, it supports the application of specific psychological theories (Kelly, 2008).

Most Useful Aspects of COMOIRA

Unlike the DECP model, with its focus on hypothesis formulation, COMOIRA's emphasis is on managing effective change. This was particularly useful in CWA 2 because the therapeutic intervention required the child to consider his/her ability and willingness to re-frame personal constructs (Dalton & Dunnett, 1992) by attempting to think and feel about the world differently to effect a behaviour change. Interestingly, a change focus was not so pivotal in CWA 1, because interventions were predominantly around curriculum access. Consequently, changes needed to be made by staff regarding quality first teaching and targeted support. This was tackled by framing recommendations in terms of relevance and manageability not change, thus emphasising that no one framework is superior to another and that context is critical.

COMOIRA's core principles were useful for guiding thinking and actions in CWA 2, in particular, the focus on co-constructing a shared understanding, as this was identified as a weakness in CWA 1. Furthermore, integration of the IFF into COMOIRA meant the interaction of within-child developmental factors (biological, behavioural, cognitive, and affective) with the complex eco-systemic context in which the child lived were fully considered (Gameson & Rhydderch, 2017). Through informed and reasoned action, a range of personal experiences, practice and research were considered when making sense of change issues. This supported and extended the scientist–practitioner role (Gameson & Rhydderch, 2017). For example, the available evidence base and the author's previous experience of working with children with behavioural difficulties informed the selection of the most appropriate therapeutic intervention to support emotional regulation. Also, her prior knowledge of working systemically in schools, coupled with an understanding of ecological systems theory (Bronfenbrenner, 1979), meant she was better equipped to support the school with making reasonable adjustments. Finally, the emphasis on enabling dialogue also ensured the focus remained on developing relationships, thus fostering transparency by applying psychology that was relevant and accessible to service-users. This avoided the perception of the TEP as "expert", which was missing in CWA 1.

Least Useful Aspects of COMOIRA

COMOIRA is an iterative process of trial and error, rather than a prescribed set of instructions (Rhydderch & Gameson, 2010). Consequently, when applying it, practitioners can start anywhere and follow any pathway through decision points. This was found to be counterintuitive; for example, it was difficult to understand that, theoretically, the change can be evaluated before the key change issue has been clarified. Therefore, COMOIRA was used more sequentially, in a way that fitted with the APDR cycle recommended by the SEND CoP. When evaluating CWA 2, it became clear that all decision points had been visited, either consciously or unconsciously, at least once. This suggests that some of the decision points happened implicitly as part of another, and, for this reason, COMOIRA can probably be simplified, especially when sharing it with service-users. Rhydderch and Gameson (2010) have demonstrated they share this view by saying the model can be adapted and personalised to make it more accessible.

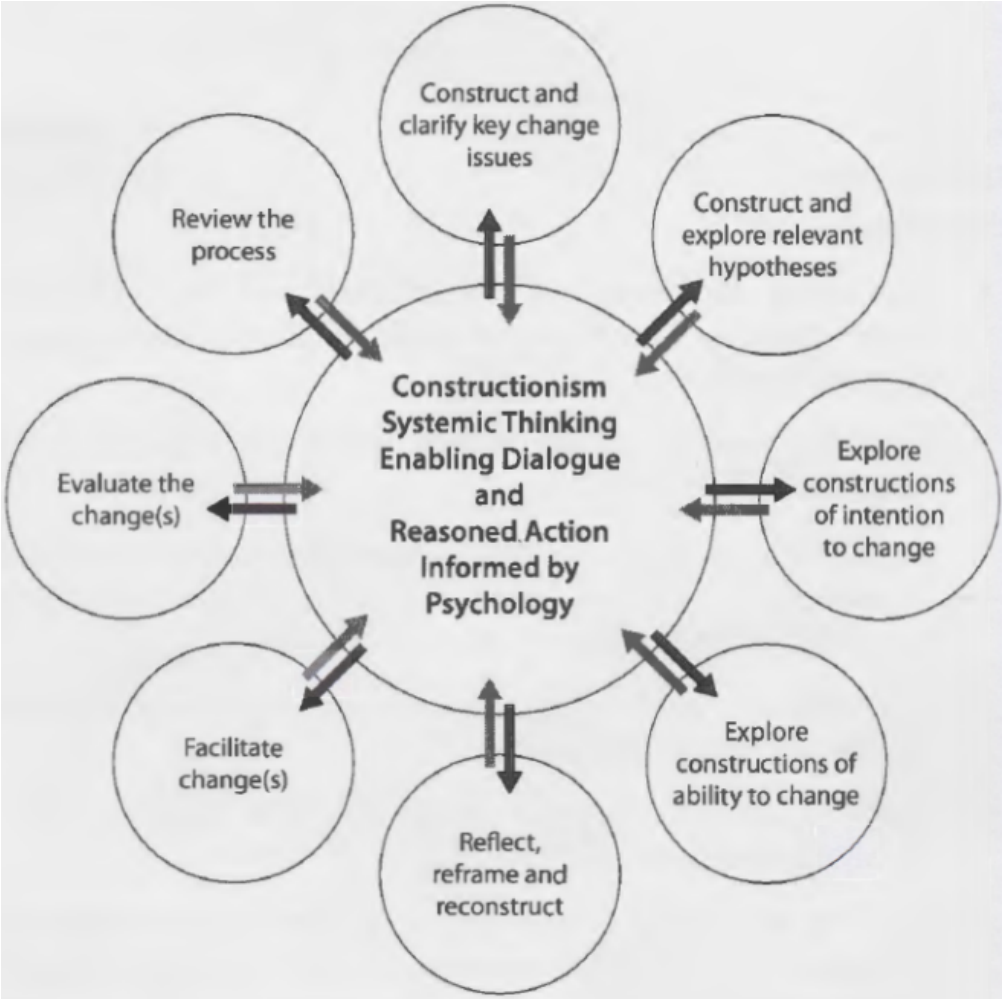
Finally, by adopting social constructionism, COMOIRA supports the notion that there can be no objective truth because knowledge is socially constructed through language and culture, and, therefore, individuals have different experiences (Burr, 2015). It could be argued, however, that it is essential to search for an objective explanation for observed behaviours, or "change priorities", to facilitate the systematic and rigorous evaluation of interventions, or "informed and reasoned actions". Furthermore, it is difficult for COMOIRA to facilitate this scientific approach because there is no specific decision point regarding evidence gathering and analysis.

In summary, the core principles that underpin COMOIRA were of particular value because they made explicit the importance of systems thinking, building relationships, establishing a shared understanding and co-construction. However, the model was over complicated and required simplification and, potentially, could result in a lack of scientific rigour.

Figure 2

COMOIRA

From "Constructing a flexible model of integrated professional practice: Part 1, conceptual and theoretical issues," by J. Gameson, G. Rhydderch, G. Ellis and T. Carroll in Educational and Child Psychology, 2003, 20(4), p. 100. Copyright 2003 by British Psychological Society.



Critique of the Monsen Model

The Monsen Model is shown in Figure 3. For CWA 3, it was chosen over the Integrated Framework (Marks Woolfson, Whaling, Stewart, & Monsen, 2003) because the former was explicitly designed for TEPs. Like the DECP model, despite its name, the Monsen Model is another example of an executive framework. Furthermore, the Monsen Model provides a series of systematic steps aimed at supporting thought processes without prescribing specific interventions. This facilitates the application of chosen theories when clarifying professional objectives and evaluating outcomes.

Figure 3

Representation of the 2008 Problem-Analysis Framework (Monsen & Frederickson, 2017)

Phase	Description
1	Background information, role and expectations
2	Initial guiding hypothesis
3	Identified problem dimensions
4	Integrated conceptualisation/formulation
5	Intervention plan and implementation
6	Monitoring and evaluation of outcomes

Most Useful Aspects of the Monsen Model

The Monsen Model focuses on the skills required to solve problems while considering the limitations of cognitive capacity, thus providing a methodology for reducing a messy, real-life problem. For example, when considering the factors influencing curriculum access in CWA 3, discrimination between relevant and irrelevant information made the problem more organised and more accessible to solve. The Monsen Model also recognises that content knowledge is as necessary as cognitive and interpersonal skills (Monsen & Frederickson, 2017).

Like the DECP model, the Monsen Model emphasises the importance of hypothesis formulation to inform the most appropriate interventions and the evaluation of outcomes. This fits within the cycle of APDR as recommended by the SEND CoP, which is useful because the process should be familiar to professionals working in schools, allowing the application of psychology in an accessible way. Unlike the DECP model, however, the Monsen Model provides a detailed step-by-step guide as to how an understanding of the problem situation can be achieved. This enabled a more strategic approach to problem-solving in CWA 3 compared to CWA 1. On reflection, the author felt she had a "scattergun" approach to data gathering in the earlier example, which led to the administration of some assessments that did not provide any additional information. The aforementioned has ethical consequences regarding unnecessary pressure for the child and the inefficient use of the school's traded time. In CWA 3, careful consideration was given to what additional information was required to triangulate already available data, thus resulting in a more parsimonious approach. However, improvements in practice will also be due to the author being more experienced.

The fourth phase, entitled "integrated conceptualisation", was the most useful aspect of the Monsen Model. Interestingly, it is the six-phase version of the Monsen Model that first introduced the IFF, a tool that aids a systematic approach to integrating hypotheses to suggest causal relationships between them. The utility of the IFF has already been discussed in CWA 1 and 2. Regarding CWA 3, this phase resulted in the child's language difficulties being prioritised when considering curriculum access and supporting progress.

Finally, unlike COMOIRA, the Monsen Model recognises the importance of searching for an objective explanation for observed behaviours to facilitate the systematic and rigorous evaluation of the implemented interventions. This requires some reductionism to make sense of the problem situation in a way that leads to positively evaluated outcomes (Monsen & Frederickson, 2017). It could be argued that this is essential to ensure professional accountability.

Least Useful Aspects of the Monsen Model

Although the sequential nature of the Monsen Model was useful for applying a systematic approach to problem-solving, some limitations within specific phases have been identified.

Phase 1 requires the TEP to gather background information and contract roles and expectations "via an initial client interview" (Monsen & Frederickson, 2017, p. 117). This felt very TEP led and could result in a power imbalance from the outset. In CWA 3, therefore, a much more consultative approach based on the lessons learned from COMOIRA was adopted. This meant prioritising the establishment of positive relationships and the exploration of others' perspectives rather than brokering a working brief. Although this resulted in a more ambiguous start to the case, in the long term, it facilitated a much more collaborative way of working.

Phase 2 involves formulating the initial guiding hypotheses. Again, in the Monsen Model, it is the responsibility of the TEP to generate these to inform the data-gathering process. In CWA 3, the initial guiding hypotheses and assessment strategy were co-constructed via the consultation process, which was a better approach for building capacity within the school and developing the skills of their staff. The author was unsure of how to frame the initial guiding hypotheses as "*If-so-then-what* propositions" (Monsen & Frederickson, 2017, p. 117) and opted for a *cause and effect* approach. For example, "The child may have speech and language difficulties (cause) that impact on his/her ability to communicate and on his/her understanding of language in the classroom (effect)."

In reality, phase 2, initial hypothesis formulation, was combined with phase 3, which requires the identification of problem dimensions. This is because the Monsen Model prescribes presenting the dimensions as behaviours, and the guiding hypotheses had already been framed in terms of cause and effect, an effect being an observed behaviour. Instead, the opportunity was taken to revisit the guiding hypotheses and accept or reject them based on the information gathered. It was also an opportunity to gather further evidence if conclusions could not be reached.

In summary, as a consciously incompetent TEP, the author found the descriptive nature of the Monsen Model particularly useful. However, this may be too prescriptive for competent, qualified EPs and this notion is supported by findings from Kelly's (2006) exploration of the utility of the Mon-

sen Model for experienced EPs. In Kelly's study, participants suggested reducing the number of steps by integrating the model as shown by Marks Woolfson et al. (2003) in their Integrated Framework. The Monsen Model also adopts rigorous scientific methodology, which is commendable but would benefit from a greater emphasis on building positive relationships, establishing a shared understanding and co-construction.

Critique of Activity Theory

The Activity Theory model is shown in Figure 4. It is an example of a practice framework because, unlike executive frameworks, it supports the application of specific psychological theories (Kelly, 2008). These being the interaction between learning and socio-cultural theories to explain the links between individual cognitive development and the social/cultural context in which the learning takes place (Leadbetter, 2017). Also, unlike executive frameworks, Activity Theory gives no guidance on processes (Wicks, 2013) and, therefore, does not readily fit with the APDR cycle recommended by the SEND CoP.

Most Useful Aspects of Activity Theory

Like COMOIRA, Activity Theory emphasises the need for a shared understanding by ensuring that motives that drive actions are explored via the *object*. This was particularly pertinent in CWA 4 as relationships between school and home had broken down. Through the application of Activity Theory, it became clear this was due to the avoidance of responsibility (motive) for supporting the young person with realising his/her goal of going to university. Also, like COMOIRA, Activity Theory tends to favour problem-free talk. For example, by defining situations in terms of an agreed *outcome* and the *mediation* required to realise it, it adopts a goal-orientated approach.

The author found the identification of language as a *mediation tool* by Activity Theory particularly useful, leading to her reviewing her consultation skills. The realisation of the importance of communication, both spoken and unspoken, was a pivotal moment in her career development and has led to better professional practices.

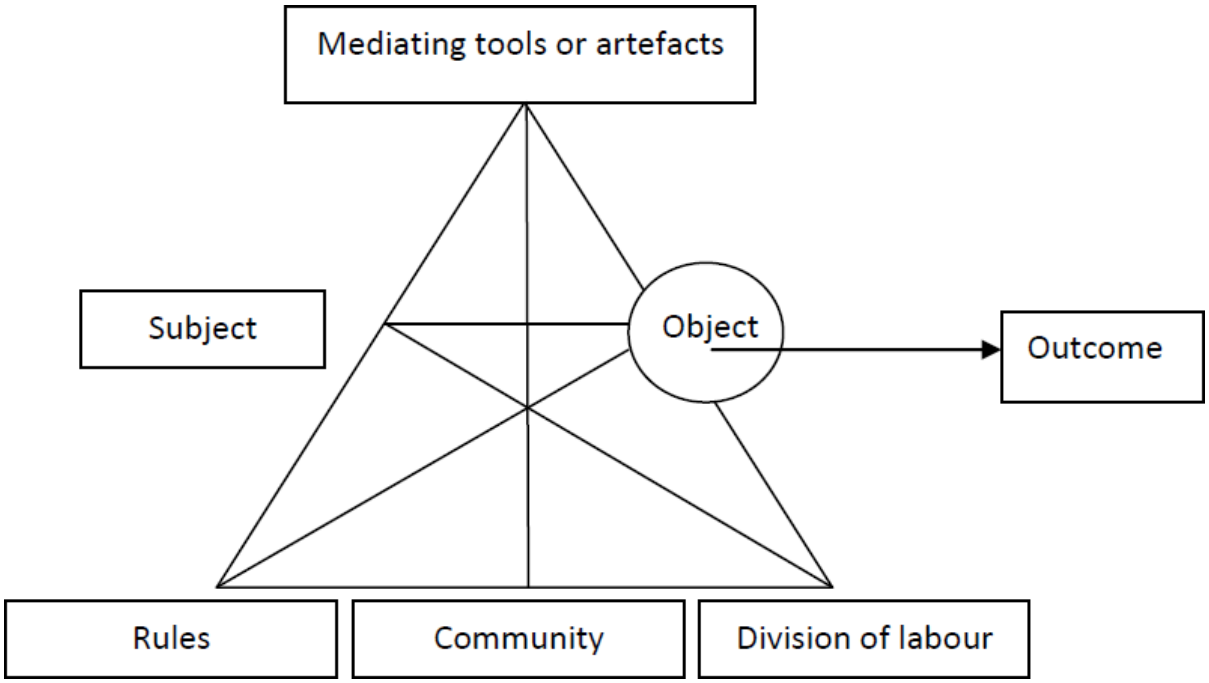
Activity Theory is the only framework under review that is explicit about the historical, societal, political and cultural factors and their interaction through the inclusion of *rules*, *community*, and *division of labour*. The priority, in CWA 4, was to help the young person and the community around him/her to implement a successful transition to college. The legislation (rules) for who was responsible (division of labour) for supporting the young person in realising this goal was particularly unclear and resulted in a very worthwhile scoping exercise. Interestingly, Activity Theory could be generalised to any problematic transition and, in hindsight, could have been applied when supporting the transition to high school in CWA 3.

Finally, Engeström's (1987) notion that contradictions and tensions within an activity system can drive change was found to be particularly interesting. This has led to the consideration of the protective and risk factors involved when negotiating actions.

Figure 4

The Second Generation Activity Theory

From "Learning by expanding: An activity theoretical approach to developmental research," by Y. Engeström, 1987, p. 78. Copyright 1987 by Y. Engeström. Reprinted with permission.



Least Useful Aspects of Activity Theory

Activity Theory's most significant limitation is the lack of direction regarding processes. The author, as a consciously incompetent TEP, required more guidance. Also, although Activity Theory does consider individual and eco-systemic factors, the IFF was found to be more user-friendly.

The second aim of this paper is to develop a practice framework that applies psychology that is relevant and accessible to a range of stakeholders. Consequently, the key terms used in Activity Theory would need to be adapted when using them with service-users as they are not particularly easy to understand. Furthermore, when used for intervention planning, Activity Theory may overcomplicate (see Leadbetter, 2017, p. 261 for an example). The application of Activity theory may lead to the consideration of the most appropriate programme, training needs, available time allocation, roles and responsibilities, and so forth. However, it could be argued that these things are common sense and would be explored without any prior knowledge of the framework.

In summary, Activity Theory is not an executive framework. However, it provides some helpful ideas that could offer a welcome addition to any framework that is more explicit about processes (e.g., the exploration of motives and contractions). Regarding professional practice, it was felt that Activity Theory's utility lies in supporting schools to analyse their policies and processes at a systemic level (e.g., by examining and expanding efficient working protocols by exploring why things are done the way they are). In CWA 4, it provided a useful tool for reviewing existing transition arrangements and improving them.

Discussion

This paper had two aims:

- the critique of five existing professional frameworks by a TEP, resulting in the production of a personalised framework, based on what works; and
- to ensure the resulting framework applies psychology that is relevant and accessible to a range of stakeholders.

By reading and re-reading the four detailed casework anal-

yses, the author adopted an inductive approach to identifying themes. Four dominant themes evolved via the semantic links she made with the data, which are listed below. Each will be discussed in turn as part of the critical synthesis process.

- Problem analysis vs. problem-free discourse.
- Hypothesis formulation and intervention.
- Epistemology.
- The TEP's changing roles.

Problem Analysis vs Problem-Free Discourse

Both the DECP model and the Monsen Model explicitly take a problem analysis approach. Alternatively, COMOIRA and Activity Theory adopt strategies that promote problem-free discourse. COMOIRA defines situations in terms of identification of change priorities and Activity Theory focuses on the achievement of positive outcomes. Although problem analysis frameworks have been criticised for promoting a child-deficit medical model (Joseph, 2017), in the author's opinion, the priority for all casework is remaining solution-focused towards the achievement of positive and achievable goals. This is a specific feature of the Monsen Model as described by the transition from an initial problem state to a solution state via a series of cognitive operations (Monsen & Frederickson, 2017). Activity Theory is similarly goal orientated.

Hypothesis Formulation–Intervention

Both the DECP model and the Monsen Model emphasise the importance of hypothesis formulation to inform the most appropriate interventions and the evaluation of outcomes. This approach fits within the cycle of APDR as recommended by the SEND CoP and should, therefore, be familiar to professionals working in schools, allowing the application of psychology in an accessible and rigorous way. Although COMOIRA and Activity Theory may frame their processes differently, there is still considerable overlap. For example, through the identification of key change issues, COMOIRA requires the collection of data, although this is not made explicit in the key decision points. Also, COMOIRA has specific steps for constructing relevant hypotheses and evaluation. Although Activity Theory is not process driven, it has a goal-orientated approach where the situation is defined in terms of outcomes and the mediation required to realise them. It could be argued that mediation and intervention, when related to casework, are the same. Therefore, the processes employed by the frameworks under review are very similar, and the main differences occur regarding their epistemology.

Epistemology

One of COMOIRA's core principles is "social constructionism", which promotes the idea that knowledge is socially constructed through language and culture and, as such, there can be no objective truth because individuals have different experiences (Burr, 2015). Activity Theory also favours this epistemology through the exploration of motives, contradictions and tensions within any one system. The DECP model and Monsen Model prefer a critical realist stance by searching for objective explanations for observed behaviours to facilitate the systematic and rigorous evaluation of the implemented interventions. Furthermore, the Monsen Model acknowledges that some reductionism will be required to make sense of the problem situation in a way that leads to positively evaluated outcomes (Monsen & Frederickson, 2017).

The social constructionist approach to establishing a shared understanding was useful, particularly during the consultation phase of casework. Also, co-construction of hypotheses and action plans promoted collaboration. Models based on social constructionism, however, potentially lack scientific rigour. Therefore, it was the objective nature of critical realism that was useful when finding evidence to support or reject specific hypotheses. Furthermore, TEPs are routinely required to write Specific, Measurable, Attainable, Relevant and Timely (SMART) targets/outcomes (DfE, DH, 2014), which, by definition, are reductionist. These observations support Robinson's (1993, p. 19) problem-based methodology and the rejection that different epistemologies exist as separate entities, as described by Paradigm Theory (Kennedy & Monsen, 2016).

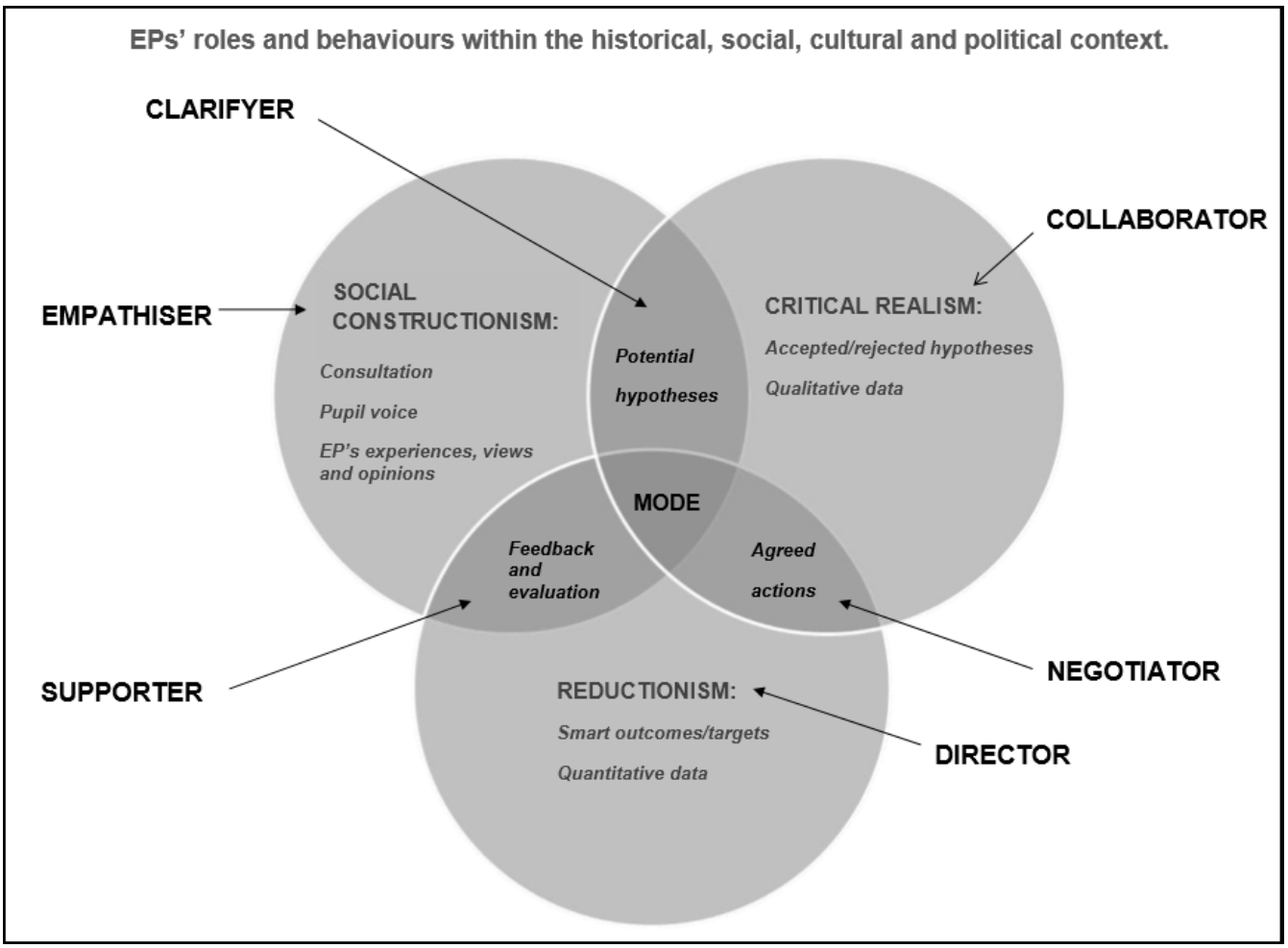
The TEP's Changing Roles

Reflection on the previous themes led the author to consider her practice and how she thinks about knowledge during different aspects of her work. From this, a theoretical model of dynamic epistemology (MODE) was developed, which now drives her professional behaviours and is illustrated in Figure 5.

MODE recognises the TEP's variable roles, depending on the nature of an activity, which is reflected in the epistemology. For example, when initially gathering views, TEPs must

Figure 5

Visual Representation of MODE



be empathetic to the experiences of others and mindful of any personal biases they may bring. During hypothesis formulation, TEPs must seek objective explanations through collaboration with all relevant stakeholders. Finally, TEPs must provide direction if stakeholders are unable or unwilling to facilitate positive change.

Sometimes, epistemologies may overlap. For example, when agreeing on potential hypotheses, it is the TEP's role to clarify objective explanations while still being mindful of different experiences and perspectives. When deciding actions, it is the TEP's role to negotiate SMART targets/outcomes that are acceptable to service-users but provide an appropriate level of challenge. Finally, when feeding back progress towards SMART targets/outcomes, it is the TEP's responsibility to be supportive and judgement free.

MODE Practice Framework

A hybrid executive/practice framework has been developed as a series of seven steps that can be understood by service-users to support the application of MODE. The framework is aligned with the cycle of APDR as recommended by the SEND CoP. It encompasses what the author considers to be best practice from the five existing frameworks that have been critiqued. The framework is outlined in Figure 6 and utilises several decision points to emphasise the iterative nature of the process.

Figure 6

MODE Practice/Executive Framework

ASSESS	**Stage 1:** Initial, in-depth consultation. **Decision point: Does the key stakeholder seek further TEP involvement?** **Stage 2:** Further exploration of concerns and contradictions from all perspectives. **Stage 3:** Generate and agree on potential hypotheses considering a range of within-person and environmental factors (see IFF). **Stage 4:** Agree assessment strategy and analyse relevant data.
PLAN AND DO	**Stage 5:** Accept/dismiss hypotheses based on the evidence. **Decision point: Is further evidence required to support conclusions?** **Stage 6:** Co-construct and implement the action plan.
REVIEW	**Stage 7:** Review outcomes and link back to initial concerns. **Decision point: re-negotiate priorities and whether TEP involvement is still required.**

Stage 1: Initial Consultation

The initial consultation should take place between the TEP and the person(s) with the most significant vested interest in solving the problem (Monsen & Frederickson, 2008) or effecting a specific change (Gameson et al., 2003). For the sake of ease, they will be called the key stakeholder(s). Based on lessons learned from COMOIRA, a consultative approach was adopted to avoid any potential power imbalance; thus prioritising the need for empathy and the establishment of positive relationships above a clear, unambiguous working brief. The decision point stresses that, through the process of consultation, it is the key stakeholder(s) who ultimately decide on whether they require further TEP involvement.

Stage 2: Further Exploration of Concerns and Contradictions from All Perspectives

Based on lessons learned from Activity Theory, shared understanding is further explored by the TEP through the investigation of potential tensions and contradictions that might exist in the wider system. This is done through the canvassing of the pupil's voice, further consultations with other stakeholders and observation(s) with an emphasis on ecological validity. Through comparison, the TEP can triangulate information gained, via initial consultation, and start to tentatively work towards objective explanations.

Stage 3: Generate and Agree on Potential Hypotheses

This is facilitated by ensuring time is given to allow all stakeholders to meet together with the TEP, compare and contrast opinions and work towards a shared understanding based on a search for objective explanations. When generating hypotheses, a range of within-person and eco-systemic factors must be considered, and the IFF is a useful visual. This enables the TEP to apply psychology that is relevant and accessible to all stakeholders to bring clarity to, and a shared understanding of, the situation. The framing of hypotheses using *cause and effect* was found to be helpful.

Stage 4: Agree Assessment Strategy and Analyse Relevant Data

The TEP needs to facilitate the co-construction of a parsimonious data gathering strategy. Collection of surplus or irrelevant data is unethical as it can cause unnecessary stress for clients and prove an ineffective use of school's traded time. Therefore, careful consideration of what additional information is required to triangulate already available data sources must be given. Data can be collected from a variety of sources, which include:

- further observations in a range of settings;
- further canvassing of opinions;
- document analyses (individual files, school data, work sampling, reports from other professionals, etc.); and
- assessments (standardised, curriculum-based, dynamic).

Stage 5: Accept/Dismiss Hypotheses Based on the Evidence

The TEP must work collaboratively with key stakeholders to analyse the evidence chain when accepting or dismissing the hypotheses generated in stage 3. Through this discussion, a shared understanding of an objective explanation can be reached and reasoned decisions made. There is also opportunity to reflect upon any potential biases that may have been raised via the initial consultation. However, if deemed contentious, this may prove to be counterproductive. There is another decision point for consideration here, stressing the iterative nature of the process and the need to ensure evidence is robust enough to support conclusions. Integration of accepted hypotheses to seek causal relationships between them can then be explored and updated on the IFF. Again, this will help key stakeholders to understand the interaction between the within-person and eco-systemic factors that impact on the complex nature of real-life problems and can act as a platform for intervention planning (Marks Woolfson, 2017).

Stage 6: Co-Construct and Implement the Action Plan

The TEP must negotiate the manageability and appropriateness of the plan with key stakeholders if it is going to be successfully implemented. This will require the identification of priorities. A range of within-person and eco-systemic interventions should be agreed that are based on research evidence as well as personal experience and practice (Gameson & Rhydderch, 2017). Client preferences should also be a consideration but not a deciding factor (Kennedy & Monsen, 2016). SMART outcomes should then be formulated. This will ensure the impact of chosen interventions can be systematically and robustly evaluated, and the TEP may need to direct stakeholders to make them suitably challenging. Lessons learned from Activity Theory mean that the action plan should:

- be specific about assigning a lead person and completion date for each action;
- be clear about resource allocation, including time and costs; and
- identify potential risk and protective factors, based on context, to outcome achievement and strategies for overcoming them.

Stage 7: Review Outcomes and Link Back to Initial Concerns

The review meeting should facilitate a discussion around the status of the actions and outcomes within the action plan to elicit a shared understanding of what has/has not gone well. It is, therefore, beneficial if all relevant stakeholders can attend. At no point should the TEP be judgemental if he/she perceives limited progress has been made. The nature of the meeting is to be supportive. Outcomes should then be linked back to the accepted hypotheses from stage 5 to discuss whether their status has changed. At this point, the action plan may require adjustment, and the final decision point is the re-negotiation of priorities and consideration of whether TEP involvement is still needed.

Limitations and Implications for Future Research

A weakness of this paper is that it has critically evaluated only five existing frameworks. Of particular note is the omission of Woolfson et al.'s Integrated Framework because it has been widely written about in the literature (Kelly, 2006; Kelly & Marks Woolfson, 2017; Wicks, 2013; Marks Woolfson, 2017), although it was explicitly designed as a less prescriptive version of the Monsen Model for competent EPs. The author is currently trialling the MODE framework, at an individual and organisational level, with two schools, and draft templates have been designed to ease recording and communication (available on request). Initial findings suggest that educational professionals find the collaborative nature of the process and the outcomes this generates more useful than the production of a lengthy report, which is often constructed in isolation. Further action research is required to evaluate the MODE framework fully.

Conclusion

Professional frameworks can enhance the TEP's role as scientist–practitioner by providing mechanisms to support the application of psychology. Also, the adoption of a systematic approach allows the effective identification of needs, clarification of objectives and evaluation of outcomes (Kelly, 2017). Therefore, the primary aim of this paper was to critique existing frameworks with the view to synthesising a personalised framework based on what works. This has resulted in the production of the MODE framework, a hybrid executive/practice framework. MODE aims to incorporate an emphasis on positive relationships and shared understanding (from COMOIRA) with the scientific rigour of hypothesis formulation (from the DECP model and the Monsen Model). Kelly and Marks Woolfson (2017) argue that available frameworks do not have to be viewed in isolation and can be integrated to demonstrate effective and defensible professional standards. The MODE framework has, therefore, been enhanced by the inclusion of the IFF and lessons learned from Activity Theory. These include exploration of contradictions and analysis of the historical, social and cultural context, via the identification of protective and risk factors, to the achievement of goals.

The secondary aim of this paper was to ensure the MODE framework applies psychology that is relevant and accessible to a range of stakeholders. Tentative, preliminary findings would suggest it does, although further research is required to ensure generalisability.

The author would like to stress that the process of critiquing existing frameworks has been hugely beneficial for her professional development, and she would encourage all TEPs to undertake a similar exercise. She is not suggesting that the MODE framework should become the framework of choice, however, as it is tailored to her working preferences. On the contrary, she believes that all EPs should look to existing frameworks to develop a personalised toolkit consisting of what works for them in a variety of contexts. Finally, to aid comparison of the frameworks discussed in this paper, a summary of each frameworks' characteristics is provided (see Appendix).

References

Birch, S., Frederickson, N., & Miller, A. (2015). What do educational psychologists do? In T. Cline, A. Gulliford, & S. Birch (Eds.), *Educational psychology* (pp. 3–30). London, England: Routledge.

British Psychological Society, Division of Educational and Child Psychology. (1999). Framework for psychological assessment and intervention. *DECP Debate*, *89*.

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, *34*(10), 844–850. doi:10.1037/0003-066X.34.10.844

Burr, V. (2015). *Social constructionism*. Hove, England: Routledge. doi:10.4324/9781315715421

Dalton, P. & Dunnett, G. (1992). *A psychology for living: Personal construct theory for professionals and clients*. Chichester, England: Wiley.

Department for Education, Department of Health. (2014). *Special educational needs and disability code of practice: 0 to 25 years: Statutory guidance for organisations which work with and support children and young people who have special educational needs or disabilities*.

Downer, A. C. (2007). The national literacy strategy sight recognition programme implemented by teaching assistants: A precision teaching approach. *Educational Psychology in Practice*, *23*(2), 129–143. doi:10.1080/02667360701320820

Engelmann, S., Becker, W. C., Carnine, D., & Gersten, R. (1988). The direct instruction follow through model: Design and outcomes. *Education and Treatment of Children*, *11*(4), 303–317. Retrieved from https://www.jstor.org/stable/42899079

Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki, Finland: Orienta-Konsultit.

Frederickson, N. & Cline, T. (2002). *Special educational needs, inclusion and diversity: A textbook*. Maidenhead, England: Open University Press.

Gameson, J. & Rhydderch, G. [Gill]. (2017). The constructionist model of informed reasoning and reasoned action (COMOIRA). In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 123–150). London, England: Kingsley.

Gameson, J., Rhydderch, G., Ellis, D., & Carroll, T. (2003). Constructing a flexible model of integrated professional practice Part 1 — Conceptual and theoretical issues. *Educational & Child Psychology*, *20*(4), 96–115.

Joseph, S. (2017). Positive psychology as a framework for practice. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 277–290). London, England: Kingsley.

Kelly, B. (2006). Exploring the usefulness of the Monsen problem-solving framework for applied practitioners. *Educational Psychology in Practice*, *22*(1), 1–17. doi:10.1080/02667360500512312

Kelly, B. (2008). Perspectives on applying educational psychology. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 15–30). London, England: Kingsley.

Kelly, B. (2017). Frameworks for practice in educational psychology: Coherent perspectives for a developing profession. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 11–28). London, England: Kingsley.

Kelly, B. & Marks Woolfson, L. (2017). Developing a system of complementary frameworks for training and practice. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 332–348). London, England: Kingsley.

Kennedy, E.-K. & Monsen, J. J. (2016). Evidence-based practice in educational and child psychology: Opportunities for practitioner–researchers using problem-based methodology. *Educational & Child Psychology*, *33*(3), 11–25.

Lane, D. A. & Corrie, S. (2007). *The modern scientist–practitioner: A guide to practice in psychology*. London, England: Routledge. doi:10.4324/9780203624616

Leadbetter, J. (2017). Activity theory and the professional practice of educational psychology. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 254–276). London, England: Kingsley.

Marks Woolfson, L. (2017). The woolfson et al. integrated framework: An executive framework for service-wide delivery. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 151–166). London, England: Kingsley.

Marks Woolfson, L., Whaling, R., Stewart, A., & Monsen, J. (2003). An integrated framework to guide educational psychologist practice. *Educational Psychology in Practice*, *19*(4), 283–304. doi:10.1080/0266736032000138535

Miller, A. & Frederickson, N. (2006). Generalizable findings and idiographic problems: Struggles and successes for educational psychologists as scientist–practitioners. In D. A. Lane & S. Corrie (Eds.), *The modern*

scientist–practitioner: A guide to practice in psychology (pp. 103–118). London, England: Routledge.

Monsen, J. J. & Frederickson, N. (2008). The monsen et al. problem solving model ten years on. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 69–93). London, England: Kingsley.

Monsen, J. J. & Frederickson, N. (2017). The Monsen problem-solving model: Problem analysis as a guide to decision making, problem solving and action within applied psychological practice. In B. Kelly, L. Marks Woolfson, & J. Boyle (Eds.), *Frameworks for practice in educational psychology: A textbook for trainees and practitioners* (pp. 95–122). London, England: Kingsley.

Rhydderch, G. [Gillian] & Gameson, J. (2010). Constructing a flexible model of integrated professional practice: Part 3 — The model in practice. *Educational Psychology in Practice*, *26*(2), 123–149. doi:10 . 1080 / 02667361003768476

Robinson, V. M. (1993). *Problem-based methodology: Research for the improvement of practice*. Bingley, England: Emerald.

Spool, J. M. (2011, November 16). *The flexibility of the four stages of competence*. UIE.

Stoltenberg, C. D., Pace, T. M., Kashubeck-West, S., Biever, J. L., Patterson, T., & Welch, I. D. (2000). Training models in counseling psychology: Scientist–practitioner versus practitioner–scholar. *The Counseling Psychologist*, *28*(5), 622–640. doi:10 . 1177 / 0011000000285002

Wicks, A. (2013). Do frameworks enable educational psychologists to work effectively and efficiently in practice? a critical discussion of the development of executive frameworks. *Educational Psychology in Practice*, *29*(2), 152–162. doi:10.1080/02667363.2013.796444

Appendix

Summary of Framework Characteristics

Characteristic	DECP	IFF	COMOIRA	Monsen	Activity Theory	MODE
Framework type	Executive	Executive	Hybrid	Executive	Practice	Hybrid
Underpinning psychological theory	None specified	None specified	Ecological systems theory (Bronfenbrenner)	None specified	Social development theory (Vygotsky)	Model of dynamic epistemology (Sedgwick)
Process	Hypothesis formulation	Hypotheses integration	Identification of change priorities	Hypothesis formulation	Mediation towards outcomes	Hypothesis formulation
Epistemology	Critical realism	Critical realism	Social constructivism	Critical realism/ reductionism	Social constructivism	Flexible
Nature of discourse	Problem analysis	Problem free	Problem free	Problem analysis	Problem free	Not specified