



Features of SEDIN interventions aligning with evidence on effective practice

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A literature review carried out for the yMIND project¹ and further refined for the purposes of SEDIN was used to identify features of teaching and learning practice where there is evidence of effectiveness. The outcomes of the literature review are set out in Part 1, and the studies included are in Part 4. The synopses for the good practice models, and in the case of Montessori, a recent review of evidence² were analysed against the outcomes of the literature review, and the findings are described below. The process helps reinforce the rationale for why SEDIN is an important project, and further clarifies for partners, trainers and teachers on what it is about Creative Learning and Montessori which makes them good practice interventions.

A striking feature of both interventions is the way they are designed to activate children as **owners of their own learning**. In Creative Learning the activities engage all children, but the choice of how to engage, and what their contribution will be resides with the child. Similarly with Montessori, where, along with choice of activity, the child themselves determines how much time they spend on the activity. Further, the Montessori method specifically sets out to develop a child's skills in self-regulation, instilling through teacher guidance habits of preparation and clearing away after a task, and respect for their environment and other learners. Teacher modelling of performance features in the Creative Learning letter writing activity.

In both approaches, teachers are guided to **elicit evidence of children's learning**: in the case of Creative Learning, through the end of lesson questions. In Montessori, teacher observation of a child's engagement with an activity to understand the progress they are making is a central part of the teacher role. The teacher then uses this information to make decisions about the next steps for that child's learning. The design of Montessori activities is such that they contain a 'control of error', which helps the child self-correct, and so implicitly **provide feedback which moves learning forward**. By providing feedback that does not include grades or extrinsic rewards, the Montessori teacher helps the child focus wholly on the learning task and intrinsic pleasure in success, rather than concerns of social standing.

Creative Learning emphasises the benefits derived from cooperative learning. All core activities involve elements of **collaborative groupwork**, where children must co-ordinate their actions for the success of the task, and learn to communicate: orally, in writing and

¹ <http://www.youth-mind.eu/>

² Marshall, C (2017) Montessori education: a review of the evidence base. In: *Science of Learning* 2:11. Available at: <https://www.nature.com/articles/s41539-017-0012-7> (accessed 19/6/18)

through body language. Creative learning also provides the creative space for each child to draw on their own funds of knowledge³ to complete a task, and so ensures they make sure they can **make connections between learning and their lives beyond school**. Teachers are further encouraged to use displays in the different languages of the classroom, and provide opportunities for all children to tell their stories. The benefits of this is enrichment of learning for all pupils, including indigenous children, increased respect for other cultures, but crucially it means all children can draw on all their knowledge and skills to progress in their learning.

The Creative Learning case studies illustrate how the approach creates links with different areas of the curriculum, and so **provides opportunities for children to revisit important content**. Similarly, a corner stone of the Montessori method, Cosmic Education, ensures pupils make connections between different subject matter and can relate what they learn to a bigger picture.

Finally, both good practice interventions **create variety in children’s learning experiences** by providing a range of activities from which teachers and children can choose.

You can find out more about the SEDIN project at: www.sedin-project.eu

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³ http://reflectiveteaching.co.uk/media/16_2_Hughes_RB_45_final.pdf

Part 1 – Principles of Effective Teaching and Learning

The principles for effective teaching and learning are listed under three broad categories: organising learning; making wider connections; and structural considerations. The numbers in parentheses refer to the sources the principles were derived from, which can be found in the bibliography at the end of the document. The bulleted descriptions are selected from the studies to help clarify what each principle entails.

Organising learning

Clarify, share and ensure learners understand learning intentions and criteria for success [2, 3]

- The achievement of important outcomes depends on activities and resources being aligned for the purpose; the likelihood of achieving them is heightened when the teacher makes this alignment transparent to learners by modelling, by making learning purposes explicit, and by matching assessment to teaching.

Elicit evidence of learner learning [1, 2, 3]

- Alignment begins with identifying what learners already know, using approaches that are appropriate for the kind of knowledge sought. This identification helps the teacher prioritise important outcomes by distinguishing new learning from existing knowledge. It also alerts the teacher/facilitator to understandings and misunderstandings that may inhibit new learning

Provide feedback that moves learning forward [1, 3]

- Constructive comments rather than grades, recipe for future actions rather than a review of past failures
- Pedagogy scaffolds and provides appropriate feedback on learners' task engagement

Activate learners as owners of their own learning (metacognition) [1, 2, 3, 4, 5, 7, 15]

- Delegate responsibilities to learners for making decisions
- Model approach to the task / verbalise metacognitive thinking
- Learners plan, describe and evaluate their thinking and learning
- Learners develop moral reasoning skills
- Pedagogy promotes learning orientations, learner self-regulation, metacognitive strategies and thoughtful learner discourse

Effective questioning [1, 2, 3, 6]

- Causes thinking or provides information to teacher about what to do next
- Teachers/facilitators can encourage whole-class discussion by using statements instead of questions
- Facilitates high standards of learner outcomes

Collaborative groupwork [1, 2, 3, 7, 9, 10, 13, 14]

- Effective when it includes group goals AND individual accountability
- The teacher/facilitator promotes dialogue and contribution by involving learners in developing group norms, by explicitly teaching necessary preparatory skills, and by modelling the skills of dialogue
- Teachers/facilitators can encourage dialogue in small groups by creating complex, cooperative tasks that draw on the multiple, diverse abilities of group members
- Pedagogical practices enable classes and other learning groupings to work as caring, inclusive, and cohesive learning communities

Provide opportunities to revisit important content and processes [1, 2, 10]

- Opportunity to learn is effective and sufficient.

Variety in learning experiences [1, 2, 7, 14]

- Multiple task contexts support learning cycles.

Making wider connections

Involve parents in their children’s learning [1, 2, 8, 9, 10, 11, 12]

- Involving learners and parents or guardians, in addition to school staff, creates a culture of shared responsibility for school issues, which is characterised by mutual support among all stakeholders.

Make connections to learners’ lives [1, 2, 9, 10]

- Learning is enhanced by the use of language that is inclusive of all learners and their experiences and by the selection of resources that make diversity visible, avoiding biased, stereotypical representations.

Engage wider community [1, 7, 9, 10, 11, 13]

- Effective links are created between school and other cultural contexts in which learners are socialised, to facilitate learning.

Structural considerations

Whole school approach [8, 9, 13, 14, 15]

- Programs use a whole-school approach to foster a safe and caring school climate— by training all teachers, administrators, and school counsellors to model and reinforce positive behaviour and anti-bullying messages throughout the school year

Continuing professional development and learning [5, 7, 11, 15]

- Formal and informal teacher training in gender equality and pedagogy
- Informal teacher training to develop attitudes of inclusion and tolerance has a positive impact

Part 2 – Mapping features of teaching and learning against evidence of effective practice

Feature of teaching and learning	Creative learning (page number of synopsis)	Montessori
Clarify, share and ensure learners understand learning intentions and criteria for success	Be specific about how they can be creative and expressive (13)	
Elicit evidence of learning	End of lesson questions to clarify what students have learned (case studies)	Teacher observation of child engagement with activities
Provide feedback that moves learning forward		<p>Decisions about what to teach are made on the basis of careful observations of the children</p> <p>Activities contain a 'control of error' that allows for self-correction</p> <p>Avoidance of grades / extrinsic rewards</p>

Feature of teaching and learning	Creative learning (page number of synopsis)	Montessori
<p>Activate learners as owners of their own learning (metacognition)</p>	<p>The child spontaneously chooses to communicate with its environment and learn from it. (7)</p> <p>Some students may not want to showcase their differences, so these activities should be totally voluntary, changed with other acceptable alternatives. (14)</p> <p>(Modeling) Teacher writes a letter (39)</p> <p>Open ended tasks of letter writing (case study 4)</p>	<p>Child chooses what activities they will engage in, and for how long</p> <p>Child develops skills in preparing for and clearing away after tasks</p> <p>Children learn to wait patiently for an activity to become available, and not to interfere in others' work, damage the environment,</p>
<p>Effective questioning</p>	<p>Technique toward opening up ... students (19)</p>	
<p>Collaborative groupwork</p>	<p>Making the child an enthusiast in communication and team spirit. (7)</p> <p>Technique toward ... intertwining students (19)</p> <p>We call the quality of relations evolving during the use of Creative Learning. These relations create a sense of commonality to the students and determine the communal goals and actions. (20)</p> <p>All case studies – in particular 4 and 5</p>	

Feature of teaching and learning	Creative learning (page number of synopsis)	Montessori
Provide opportunities to revisit important content and processes	Case study lessons make connections with different areas of the curriculum	Cosmic education ensures CYP can make connections across different subject areas
Variety in learning experience	Promotion of different activities to engage learners	Range of activities
Involve parents in their children's learning		
Make connections to learners' lives	<p>gives the child the opportunity to explore the social environment, its own inclinations and interests (7)</p> <p>Display welcome signs in different languages - photographs/items from different countries represented within the student body. (13)</p> <p>Provide creative opportunities for children to tell their stories (14)</p> <p>Imagination and visualization leaves no space to discrimination (17)</p> <p>Case study 3 encourages children to share experiences from their country of origin (34)</p>	
Engage wider community		

Part 3 – Approach to the Literature Review

This framework of principles for effective practice in teaching and learning provides a means by which the potential can be assessed for the yMIND good practice models to make a difference for learners.

The framework highlights for those drafting guidance and implementing the GP models what essential elements of the GP models are, which mean they are likely to improve learner understanding, knowledge, attitudes and behaviour. The framework also provides an opportunity to reflect on where productive adaptations to the models might be made.

The framework does **not** represent a prescription for what should be included in the GP models. The GP models have been carefully developed and tested over time and have their own integrity. This framework acts as a tool to help further understand what the elements of the models are which mean their introduction into schools and community settings has value.

The sources for the review were identified by a search of databases of organisations which apply rigorous standards in evaluating education research. These include:

- OECD <http://www.oecd.org/edu/school/>
- Education and training policies based on evidence (EU) http://ec.europa.eu/education/policy/strategic-framework/indicators-benchmarks_en
- What Works Clearing House (USA) <https://ies.ed.gov/ncee/wwc/>
- Best Evidence Syntheses (NZ) <https://www.educationcounts.govt.nz/publications/series/2515>
- Education Endowment Fund (England) <https://educationendowmentfoundation.org.uk/>

Sources were also sought which evaluated and synthesised evidence specific to the focus areas of the GP models, including gender equality, bullying, diversity, and violence prevention.

While many of the sources emanate from Anglo-Saxon countries, the research they draw on is international, and in many cases conducted in ethnically diverse settings.

Given time constraints, this review of research is not exhaustive. However, key studies have been included, and the principles derived are grounded in a diverse range of academically rigorous research and contexts.

Part 4 – Studies included in the literature review

[1] A. Alton-Lee, “Quality teaching for diverse learners in schooling: Best Evidence Synthesis,” Ministry of Education, Auckland, 2003.

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[5] What Works Clearinghouse, “WWC Intervention Report: Facing History and Ourselves,” Institute of Education Sciences, US Department of Education, 2006.

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www.childtrends.org/wp-content/uploads/2013/10/briefing_bullying5_anm1.pdf

[9] What Works Clearinghouse, "WWC Intervention Report: Too Good for Drugs and Violence," Institute of Education Sciences, US Department of Education, 2006.

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[10] What Works Clearinghouse, "WWC Intervention Report: Too Good for Violence," Institute of Education of Sciences, US Department of Education, 2006.

<https://ies.ed.gov/ncee/wwc/Intervention/250>

[11] OECD, "Immigrant learners at school: Easing the journey towards integration," OECD Publishing, Paris, 2015.

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[12] OECD, "School leadership for learning: Insights from TALIS 2013," OECD Publishing, Paris, 2016.

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[13] What Works Clearinghouse, "WWC Intervention Report: Connect with Kids," Institute of Education Sciences, US Department of Education, 2016.

<https://ies.ed.gov/ncee/wwc/Intervention/204>

[14] What Works Clearinghouse, "WWC Intervention Report: Lessons in Character," Institute of Education Sciences, US Department of Education, 2006.

<https://ies.ed.gov/ncee/wwc/Intervention/187>

[15] EEF, "Metacognition and self-regulated learning," Education Endowment Foundation, London, 2018.

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