European Foundation for the Improvement of Living and Working Conditions

Early childhood care: working conditions, training and quality of services – A systematic review

Annexes 2–9

Annex 2: Search strategy

This is a description of key search terms entered into electronic databases to identify relevant publications. They are organised into key concepts. Following this is a record of a search run on the Applied Social Science Index and Abstracts (ASSIA), using PROQUEST.

Concept one: population	Concept two: Continuous Professional Development (CPD)	Concept three: Working conditions (WC)	Concept four: Early Childhood Education And Care Provision (ECEC)
Child*	"Continuing education"	"Career mobility"	"Early childhood care and education"
Practitioner*	"Communities of practice"	"Career progress*"	"Early childhood cent*"
Professional*	"In service*"	"Class size"	"Early childhood education and care"
Staff	Inservice*	"Employment status"	"Early childhood education"
Worker*	"In-service*"	"Group size"	"Early childhood program*"
Workforce	"Peer learning"	"Non contact time"	"Early childhood provision*"
Teacher*	"Practice based research"	"Professional association"	"Early education"
Assistant*	"Professional education"	"Turn over"	"Early years provision"
"Family day carer"*	"Professional development"	"Trade union"	"Child care"
	"Professional learning"	"Work* condition"	"Child-care"
	"Professional learning communit*"	"Work* environment"	Childcare
	Accredit*	"Work* hours"	Creche*
	Conference*	"Work schedule"	Day-care
	Competence*	Benefits	"Day-care"

	Course*	Gender*	Daycare
	Development	Incentive*	Kindergarten
	E-learning	Inter-professional	Nursery
	Knowledge	"Inter-professional"	Pre-primary
	Intergenerational	Interprofessional	Pre-school*
	"Inter generational"	Leadership	
	"Inter-generational"	Manage*	
	Learning	Planning	
	Mentor*	Preparation	
	Network*	Ratio	
	Program*	Salar*	
	Seminar*	Support*	
	Training	Team	
	Workshop*	Wages	
		Workload	

Early childhood care: working conditions, training and quality of services – A systematic review

Combinations of search terms or their equivalent from the individual databases' thesauri were explored until all search terms were exhausted. The following are search strings and combinations used for searching the database Applied Social Science Index and Abstracts (ASSIA), using PROQUEST.

ASSIA

Concept one (C1): Population

((ti(child) OR ab(child) OR ti((practitioner OR professional)) OR ab((practitioner OR professional)) OR ti((staff OR worker)) OR ab((staff OR worker)) OR ti(workforce) OR ab(workforce)) OR (SU.EXACT("Children") OR SU.EXACT("Nursery nurses"))) OR SU.EXACT("Teachers") OR ti((Assistant* OR "family day carer*")) OR ab((Assistant* OR "family day carer*")) AND pd(>19911231)

Concept two (C2): CPD

((ti("communities of practice" OR "professional learning") OR ab("Communities of practice" OR "professional learning") OR ti((professional development OR "in service")) OR ab((professional development OR "in service")) OR ti((intergenerational OR coach*)) OR ab((intergenerational OR coach*)) OR ti((peer learning OR practice based research)) OR ab((practice based research OR peer learning)) OR ti((education OR conference)) OR ab((education OR conference))) OR ti((competence OR course)) OR ab((competence OR course)) OR ti((development OR e-learning)) OR ab((development OR e-learning)) OR ti((knowledge OR learning)) OR ab((knowledge OR learning)) OR ti((mentor* OR network*)) OR ab((mentor* OR network*)) OR ti((program* OR accredit*))) OR ab((program* OR accredit*)) OR ti((seminar* OR training)) OR ab((seminar* OR training)) OR ti((workshop* OR "continuing education")) OR ab((workshop OR "continuing education")) OR ti("professional learning communit*") OR ab("professional learning communit*") OR SU.EXACT("Professional development") OR (SU.EXACT("Learning") OR SU.EXACT("Continuing education") OR SU.EXACT("Training")) AND pd(>19911231)

Concept three (C3): WC

((((ti("career progress*") OR ab("career progress*") OR ti((planning OR preparation)) OR ab((planning OR preparation)) OR ti(("non contact time" OR "employment status")) OR ab(("non contact time" OR "employment status")) OR ti((support OR gender*)) OR ab((support OR gender*)) OR ti(("group size" OR "class size")) OR ab(("group size" OR "class size"))) OR ti(("career mobility" OR inter-professional)) OR ab(("career mobility" OR inter-professional)) OR ti(("professional association" OR team)) OR ab(("professional association" OR team)) OR ti((turnover OR "trade union*")) OR ab((turnover OR "trade union*")) OR ti(("work* conditions" OR "work* hours")) OR ab(("work* conditions" OR "work* hours"))) OR ti(("work*environment" OR leadership)) OR ab(("work* environment" OR leadership)) OR ti((benefit* OR incentive*)) OR ab((benefit* OR incentive*)) OR ti((manage* OR ratio)) OR ab((manage* OR ratio)) OR ti((wage* OR salar*)) OR ab((wage* OR salar*)) OR ti(workload)) OR ab(workload) OR ti("work* schedule") OR ab("work* schedule") OR (SU.EXACT.EXPLODE("Working conditions") OR SU.EXACT.EXPLODE("Employment status")) AND pd(>19911231)

Concept 4 (C4): ECEC provision

(ti("early childhood education") OR ab("early childhood education") OR ti(("early childhood program*" OR "early years provision")) OR ab(("early childhood program*" OR "early years provision")) OR ti(("pre-primary" OR "child care")) OR ab(("pre-primary" OR "child care")) OR ti(("childcare" OR "early childhood care and education")) OR ab(("childcare" OR "early childhood care and education")) OR ti(("early childhood education and care" OR "pre-school")) OR ab(("early childhood education and care" OR "pre-school"))) OR ti((Kindergarten OR kindergarden)) OR ab((Kindergarten OR kindergarden)) OR ti((creche* OR nursery)) OR ab((creche* OR nursery)) OR ti((daycare OR "early childhood centers")) OR ab((daycare OR "early childhood centers")) OR ti(("early education" OR "early childhood provision")) OR SU.EXACT("Early childhood education") OR SU.EXACT("Quality child care") AND pd(>19911231)

C1 AND C2 AND C3 AND C4 (Combined)

((((ti("communities of practice" OR "professional learning") OR ab("Communities of practice" OR "professional learning") OR ti((professional development OR "in service")) OR ab((professional development OR "in service")) OR ti((intergenerational OR coach*)) OR ab((intergenerational OR coach*)) OR ti((peer learning OR practice based research)) OR ab((practice based research OR peer learning)) OR ti((education OR conference)) OR ab((education OR conference))) OR ti((competence OR course)) OR ab((competence OR course)) OR ti((development OR e-learning)) OR ab((development OR e-learning)) OR ti((knowledge OR learning)) OR ab((knowledge OR learning)) OR ti((mentor* OR network*)) OR ab((mentor* OR network*)) OR ti((program* OR accredit*))) OR ab((program* OR accredit)) OR ti((seminar* OR training)) OR ab((seminar* OR training)) OR ti((workshop* OR "continuing education")) OR ab((workshop OR "continuing education")) OR ti("professional learning communit*") OR ab("professional learning communit*") OR SU.EXACT("Professional development") OR (SU.EXACT("Learning") OR SU.EXACT("Continuing education") OR SU.EXACT("Training")) AND pd(>19911231)) AND ((((ti(child) OR ab(child) OR ti((practitioner OR professional)) OR ab((practitioner OR professional)) OR ti((staff OR worker)) OR ab((staff OR worker)) OR ti(workforce) OR ab(workforce)) OR (SU.EXACT("Children") OR SU.EXACT("Nursery nurses"))) OR SU.EXACT("Teachers") OR ti((Assistant* OR "family day carer*")) OR ab((Assistant* OR "family day carer*")) AND pd(>19911231)) AND ((ti("early childhood education") OR ab("early childhood education") OR ti(("early childhood program*" OR "early years provision")) OR ab(("early childhood program*" OR "early years provision")) OR ti(("pre-primary" OR "child care")) OR ab(("pre-primary" OR "child care")) OR ti(("childcare" OR "early childhood care and education")) OR ab(("childcare" OR "early childhood care and education")) OR ti(("early childhood education and care" OR "pre-school")) OR ab(("early childhood education and care" OR "pre-school"))) OR ti((Kindergarten OR kindergarden)) OR ab((Kindergarten OR kindergarden)) OR ti((creche* OR nursery)) OR ab((creche* OR nursery)) OR ti((daycare OR "early childhood centers")) OR ab((daycare OR "early childhood centers")) OR ti(("early education" OR "early childhood provision")) OR SU.EXACT("Early childhood education") OR SU.EXACT("Quality child care") AND pd(>19911231)) AND ((((ti("career progress*") OR ab("career progress*") OR ti((planning OR preparation)) OR ab((planning OR preparation)) OR ti(("non contact time" OR "employment status")) OR ab(("non contact time" OR "employment status")) OR ti((support OR gender*)) OR ab((support OR gender*)) OR ti(("group size" OR "class size")) OR ab(("group size" OR "class size"))) OR ti(("career mobility" OR inter-professional)) OR ab(("career mobility" OR inter-professional)) OR ti(("professional association" OR team)) OR ab(("professional association" OR team)) OR ti((turnover OR "trade union*")) OR ab((turnover OR "trade union*")) OR ti(("work* conditions" OR "work* hours"))

Early childhood care: working conditions, training and quality of services – A systematic review

OR ab(("work* conditions" OR "work* hours"))) OR ti(("work*environment" OR leadership)) OR ab(("work* environment" OR leadership)) OR ti((benefit* OR incentive*)) OR ab((benefit* OR incentive*)) OR ti((manage* OR ratio)) OR ab((manage* OR ratio)) OR ti((wage* OR salar*)) OR ab((wage* OR salar*)) OR ti(workload)) OR ab(workload) OR ti("work* schedule") OR ab("work* schedule") OR (SU.EXACT.EXPLODE("Working conditions") OR SU.EXACT.EXPLODE("Employment status")) AND pd(>19911231))

Search Sources

Electronic sources:

- ASSIA (Applied Social Science Index and Abstracts)

- British Education Index

- Child data

- Educational Research Abstracts (ERA)

- Educational Resources information Centre (ERIC)

- International Bibliography of the Social Sciences (IBSS)

- Psycinfo

- SCOPUS

- SSCI/ web of knowledge [includes Web of Science]

International websites:

- OECD Library

- EC Commission Websites:

  o DG Education and Culture

  o DG Employment

  o DG Justice

- Eurydice database

- Social Policy Digest

National websites and databases: via country experts in all EU Member States

Journals

- Contemporary Issues in Early Childhood
- Early Childhood Research Quarterly
- Early Education and Development
- Early Years: An International Journal
- Early Child Development and Care
- European Early Childhood Education Research Journal
- European Journal of Education
- International Journal of Early Childhood
- International Journal of Early Years Education
- International Research in Early Childhood Education
- Journal of Early Childhood Research
- Journal of Early Childhood Teacher Education
- Scandinavian Journal of Education Research
- Children and Society

Annex 3: Quality appraisal criteria: Views studies

1. **Enhancing reliability of data collection methods** (*e.g. use of interview topic guides*)

    a. Yes, a (fairly) thorough attempt was made (*specify*)
    b. Yes, several steps were taken (*specify*)
    c. Yes, minimal few steps were taken (*specify*)
    d. No, not at all/ Not stated/ Can't tell (*specify*)

2. **Enhancing validity of data collection methods** (*e.g. pilot interviews*)
    a. Yes, a (fairly) thorough attempt was made (*specify*)
    b. Yes, several steps were taken (*specify*)
    c. Yes, minimal few steps were taken (*specify*)
    d. No, not at all/ Not stated/ Can't tell (*specify*)

3. **Enhancing reliability of data analysis methods** (*e.g. use of independent coders*)

    a. Yes, a (fairly) thorough attempt was made (*specify*)
    b. Yes, several steps were taken (*specify*)
    c. Yes, minimal few steps were taken (*specify*)
    d. No, not at all/ Not stated/ Can't tell (*specify*)

4. **Enhancing validity of data analysis methods** (*e.g. searching for negative cases*)

    a. Yes, a (fairly) thorough attempt was made (*specify*)
    b. Yes, several steps were taken (*specify*)
    c. Yes, minimal few steps were taken (*specify*)
    d. No, not at all/ Not stated/ Can't tell (*specify*)

5. **Is sufficient data presented to mediate between data and interpretation (*specify*)**
    (*e.g. Use of quotes; volume of quotes; do they support findings reported*)

6. **Study quality: Weight of Evidence:**

    1. **Were steps taken to increase rigour in the sampling?** (*Consider whether: the sampling strategy was appropriate to the questions posed in the study (e.g. was the strategy well reasoned and justified); attempts were made to obtain a diverse sample of the population in question (think about who might have been excluded who might have had a different perspective to offer); characteristics of the sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were in terms of for example, basic socio-demographics, characteristics relevant to the context of the study?)*)

        a. Yes, a (fairly) thorough attempt was made (*specify*)

   b. Yes, several steps were taken (*specify*)
   c. Yes, minimal few steps were taken (*specify*)
   d. No, not at all/ Not stated/ Can't tell (*specify*)

2. **Were steps taken to increase rigour in the data collected?** (*Consider whether: data collection was comprehensive, flexible and/or sensitive enough to provide a complete and/or vivid and rich description of people's perspectives and experiences (e.g. did the researchers spend sufficient time at the site/ with participants? did they keep 'following up'? Was more than one method of data collection used?); Steps were taken to ensure that all participants were able and willing to contribute (e.g. processes for consent, language barriers, power relations between researchers and participants).*)

   a. Yes, a (fairly) thorough attempt was made (*specify*)
   b. Yes, several steps were taken (*specify*)
   c. Yes, minimal few steps were taken (*specify*)
   d. No, not at all/ Not stated/ Can't tell (*specify*)

3. **Were steps taken to increase the rigour in the analysis of the data?** (*Consider whether: data analysis methods were systematic (e.g. was a method described/ can a method be discerned?); diversity in perspective was explored; The analysis was balanced in the extent to which it was guided by preconceptions or by the data; quality analysis in terms of interrater reliability/agreement; the analysis sought to rule out alternative explanations for findings (searching for negative cases/ exceptions, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity).*)

   a. Yes, a (fairly) thorough attempt was made (*specify*)
   b. Yes, several steps were taken (*specify*)
   c. Yes, minimal few steps were taken (*specify*)
   d. No, not at all/ Not stated/ Can't tell (*specify*)

4. **Were the findings of the study grounded in/ supported by the data?**
   (*Consider whether: enough data are presented to show how the authors arrived at their findings, the data presented fit the interpretation/ support the claims about patterns in data; the data presented illuminate/ illustrate the findings; quotes are numbered or otherwise identified and the reader can see they don't come from one or two people.*)

   a. Yes, a (fairly) thorough attempt was made (*specify*)
   b. Yes, several steps were taken (*specify*)
   c. Yes, minimal few steps were taken (*specify*)
   d. No, not at all/ Not stated/ Can't tell (*specify*)

5. **Rate the findings of the study in terms of their breadth and depth**. (*Consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/ analysed. Consider whether: A range of issues are covered; The perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective); richness and complexity has been portrayed (e.g. variation explained, meanings illuminated); There has been theoretical/ conceptual development.*)

   a. Good/ fair breadth and depth (*specify*)
   b. Good/Fair breadth, but little depth (*specify*)
   c. Good/ fair depth but very little breadth (*specify*)
   d. Limited breadth or depth (*specify*)

6. **To what extent does the study privileges the perspectives and experiences of participants/ECEC professionals?** (*Consider whether: there was a balance between open-ended and fixed response questions; participants were involved in designing the research; There was a balance between the use of an a priori coding framework and induction in the analysis; The position of the researchers (did they consider it important to listen to the perspectives of participants/ ECEC professionals); steps were taken to assure confidentiality and put participants at ease.*)

   a. A lot (*specify*)
   b. Somewhat (*specify*)
   c. A little (*specify*)
   d. Not at all (*specify*)

7. **Usefulness** (*Guidance: think (mainly) about the answers you have given to questions 4-6 above and consider: the match between the study aims and findings and the aims and purpose of the synthesis; its conceptual depth/ explanatory power.*)
   - **High** (*To be considered high studies need to be coded as the following on answer 4-to-6: 4. A - Well grounded AND 5. A or B or C AND 6. A or B*)
   - **Medium** (*To be judged as medium studies will not meet the criteria for High or Low (e.g. be limited on 4, 5 or 6) but will be AT LEAST 4. B - Fairly well grounded 5. A, B, or C. AND 6. at least B or C.*)
   - **Low** (*Studies are low if they are coded as 4: C - Limited OR 5: D - Limited OR 6: D - Not at all OR*)

8. **Reliability** (*Guidance: Think (mainly) about the answers you have given to questions 1-4 above: 1. Were steps taken to increase rigour in sampling; 2. Were*

steps taken to increase rigour in the data collected; 3. Were steps taken to increase the rigiour in the analysis; 4. Were the findings of the study grounded by the data. To be reliable all four questions need to have taken 'fairly or several steps' to be considered sound.)

- **High** (*To be judged as high studies need to answer at least several or fairly on all four criteria*
- **Medium**
- **Low**

Annex 4: Quality appraisal criteria: Impact studies

1. **Selection bias:**
    a. How was the study sample selected?
        i. Simple random sample
        ii. Systematic random sample
        iii. Stratified sample
        iv. One-stage cluster sample
        v. Two-stage cluster sample
        vi. Convenience sample
        vii. Non-equivalent control group design
        viii. Unclear
        ix. Not stated

    b. How were participants allocated to intervention- and control group?
        i. Random, no information given
        ii. Random, information given (*specify*)
        iii. Other (*specify*)
        iv. Not relevant – no control group
        v. Unclear
        vi. Not stated

    c. Which major prognostic factors are baseline values reported for?
        i. Ethnicity
        ii. Age
        iii. SES (income or class)
        iv. All pre-intervention outcome scores
        v. Some pre-intervention outcome scores
        vi. None

    d. Were baseline values of major prognostic factors reported for each group as allocated?
        i. No, values not reported by group
        ii. Yes for all individuals in study at baseline measurement
        iii. Yes for all individuals remaining in study for post-test and/or follow-up
        iv. Yes for some other subgroup of individuals
        v. Not relevant – no control group

    e. Are baseline values of major prognostic factors balanced between the groups in the trial?
        i. Groups are equivalent/balanced (*specify*)
        ii. Groups are not equivalent/balanced (*specify*)
        iii. Other (*specify*)
        iv. Unclear (*specify*)

      v. Not relevant – no control group

   f. How did authors assess equivalence of the groups?
      i. Not assessed
      ii. They compared descriptive data
      iii. They used statistical tests
      iv. Unclear (*specify*)
      v. Not relevant – no control group

   g. Did the analysis adjust for baseline imbalances in major prognostic factors between groups?
      i. Not relevant because groups were equivalent/balanced
      ii. Yes (*specify*)
      iii. No
      iv. Unclear because analysis is poorly described
      v. Not relevant – no control group

2. Detection bias:
   a. Was the allocation to intervention and control groups done blind?
      i. Yes (*specify*)
      ii. No (*specify*)
      iii. Unclear (*specify*)
      iv. Not stated
      v. Not relevant – no control group

   b. Were participants aware which group they were in for the evaluation?
      i. Yes
      ii. No
      iii. Unclear (*specify*)
      iv. Not stated
      v. Not relevant – no control group

   c. Was outcome measurement done blind?
      i. Yes (*specify*)
      ii. No (*specify*)
      iii. Unclear (*specify*)
      iv. Not stated
      v. Not relevant – no control group

3. Attrition bias:

    a. Is the attrition rate reported separately according to allocation group?
   - i. Yes
   - ii. No (*specify*)
   - iii. No drop-outs
   - iv. Not relevant – no control group

    b. Was any information provided on those who dropped out of the study?
   - i. Yes
   - ii. Not relevant – no drop-outs
   - iii. Unclear (*specify*)
   - iv. No, not stated

4. Selective reporting bias:

    a. What outcomes did the authors say they were intending to measure?
   - i. Child outcomes (*specify*)
   - ii. Staff-child interaction (*specify*)
   - iii. Quality (*specify*)
   - iv. Unclear (*specify*)
   - v. Not stated

    b. For whom outcomes reported?
   - i. Information for all individuals/groups
   - ii. Information for some individuals/groups only (*specify*)
   - iii. Unclear (*specify*)
   - iv. Not relevant – no control group

    c. For which outcomes were data collected at follow-up presented?
   - i. Information for all outcomes
   - ii. Information for some outcomes only (*specify*)
   - iii. Unclear (*specify*)

    d. Are there any obvious errors in numerical reporting?
   - i. Yes (*specify*)
   - ii. No

5. **Decision on soundness of study:**

    a. Was selection bias avoided? (*Study can pass if*: (*1*) *participants were allocated using an acceptable method of randomisation; (2) baseline values of major prognostic factors are reported for each group for virtually all participants as allocated AND if baseline values of major prognostic factors are balanced between groups in the trial OR imbalances were adjusted for in analysis*)
        i. Yes (specify)
        ii. No (*specify*)
        iii. Yes, to some extent (*specify*)

    b. Was bias due to loss to follow-up avoided? (*Study can pass if the attrition rate is reported separately according to allocation group AND baseline values of major prognostic factors were balanced between groups for all those remaining in the study for analysis OR the attrition rate differs across groups by less than 10% and is overall less than 30%*)
        i. Yes (*specify*)
        ii. No (*specify*)
        iii. Yes, to some extent (*specify*)

    c. Was selective reporting bias avoided? (*Study can pass if the authors report on all outcomes they intended to measure as described in the aims of the study*)
        i. Yes (*specify*)
        ii. No (*specify*)
        iii. Yes, to some extent (*specify*)

    d. Is the study sound? (*To be sound a study has to avoid all three of the specified types of bias.*)
        i. Sound
        ii. Not sound
        iii. Sound despite discrepancy with quality criteria (*specify*)

Annex 5: Details of CPD views studies: study characteristics

Author, date, title	Country	Aims and methods	Settings	Sample characteristics	Details of CPD studied	Results/Findings
Ang (2012). Leading and Managing in the Early Years: A Study of the Impact of a NCSL Programme on Children's Centre Leaders' Perceptions of Leadership and Practice.	United Kingdom	Explore children's centre leaders' perceptions of leadership and the impact of their professional qualification - the National Professional Qualification in Integrated Centre Leadership (NPQICL) - on their professional practice.	Preschool Group Care	359 ECEC practitioners (children's centre leaders)	- NPQICL: aims to ensure that all children's centre leaders have a clear sense of the role that they and their team play in improving the ECM outcomes for young children, and narrowing the gaps in achievements between those who are advantaged and those most disadvantaged in society. - The focus of the NPQICL is also on equipping child's centre leaders with the necessary leadership competencies in delivering integrated services that is core to their settings' provision.	- 22 participant responses from the overall questionnaires and follow-up interviews found that their role as early years leaders was also an empowering one. - For others, their learning, reflective journey was centred more on their personal development, on what they had learnt about themselves since taking the course, and how this has impacted on their personal development. - In addition, there is also some evidence from the follow-up interviews that reflective learning can lead directly to changes in the participant's leadership and in turn to the setting's culture and style of working. - Responses from the questionnaires and fellow-up interviews indicate a strong commitment to reflective learning and practice as an important aspect of effective leadership.

Asplund Carlsson et al. (2008). From doing to learning and understanding. A study of teacher's learning within the aesthetic domain. (Translation from Swedish)	Sweden	Analyze pre-school teachers' discourses about children's aesthetic learning (music, dance/movement and poetry).	Preschool	- Preschool teachers - Nursery Nurses	- 18 months in-service training (lectures, workshops, video recorded observations)	The teachers felt they had become more aware of the "object of learning" in areas such as music and what they were supposed to teach children. They felt they had become more actively involved with children and could ask questions that would direct the child's attention and help the child discover and discern variations.
Aubrey et al. (2012). Enhancing Thinking Skills in Early Childhood.	United Kingdom	- Investigate two thinking skills programmes. - Explore whether a discrete CA approach and an infusion approach can enhance children's thinking skills and reasoning - Investigate whether such approaches transform teachers' practice.	4 schools in two local authorities (LAs), in England and Wales; two urban and two rural, mono-cultural and bilingual.	4 schools: - 12 children (5 - 6 years old) - Teachers, head teachers and advisors	- 'Key to Learning' - programme: 12 curricular programmes from sensory mathematics, logic to construction and 36 key activities for children aged 3-7 years. Each programme has 60 sessions: 30 for young children and 30 for older children. Group work is emphasised. - 'Let's Think!' – programme: 27 special activities, plus 3 introductory listening activities for groups of up to six children.	- All school staff interviewed felt that the Let's Think! programme enhanced their pupils' thinking skills, leading to more critical thinking and children thinking more for themselves. - They noted improved use of language, more attentive listening, increased social cooperation and children having more confidence and independence. - All schools mentioned a noticeable impact on children with English as an additional language (EAL) and/or special educational needs (SEN). - All school staff interviewed felt that using the materials

						had not only changed teachers' practice but also had had a whole-school impact, with the use of the programmes leading to a thinking skills philosophy being used in other lessons and situations in three of the four schools. All teachers and coordinators said that the use of the programmes has changed how they taught, and they all stressed the importance of the quality of teacher and pupil talk, with questioning technique being the key.
Bleach (2013). Using action research to support quality early years practice.	Ireland	Examine the use of action research as a CPD tool by the Early Learning Initiative (ELI),	14 Community based ECEC Centres in two disadvantaged area's in Ireland	- Staff working in early childhood services in Ireland - 14 community-based ECCE centres	- Síolta, The Quality Framework for Early Childhood Education and Aistear, the Early Childhood Curriculum Framework. - Practitioner-oriented research - Mentoring	- The participants mentioned that they learned new ways of interacting with children. - They also felt that they had a greater understanding of the curriculum - Increased skills in critical Reflection - More planning and preparation for play - Participants could see more clearly where they fitted into the bigpicture, that they were at the beginning of the child's

						learning journey and that they provided the foundation for future learning. This enhanced their perceptions of themselves professionals. - The action research cycle supported the implementation of Síolta and Aistear. It also helped the practitioners develop the skills needed to improve the quality of teaching and learning in their centres. Using the Síolta reviews as instruments for reflecting on practice, was the key to the success of the programme.
Blenkin and Hutchin (1998). Action research, child observations and professional development: some evidence from a research project.	United Kingdom	Enable practitioners to find ways of improving their understanding of both their professional role and the children's learning.	Nursery settings with under fives	The project's action researchers mainly worked in nursery settings with under fives.	- Action Research - Observations - Case Study	- The process of the analysis itself helped practitioners to gain confidence in their understanding. - Changes to practice initially occurred through planning new activities for the children, but later staff changed practice in more complex ways (e.g. improvements in staff-child interactions) - It is clear from the case study that practitioners show a deeper understanding of the impact of their provision on children's learning. There is also some evidence of this

						leading to developments in their practice. - The actual child observations themselves and the commitment to reflect on and analyse them was the key to change and development in this case study -Child observations made as part of the evidence gathering process of action research have had a definite impact on professional understanding and self critical awareness
Cardoso (2012). Creating contexts for quality in childcare: playfulness and learning. (Translation from Portuguese)	Portugal	Analyze the construction of an educational context that encourages the exploration and development of significant learning by the children. Explore how quality ECEC services impact children's learning and how the 'training in context approach' (with action research) ensures the production of new knowledge and continuous (trans)formation of participants and the	Private non-profit ECEC centre with children from 0 to 6 years old (crèche and pre-school) and after school activities	1 community crèche (0-3) Core participants: - 4 pre-school teachers, - 8 auxiliary staff, - 7 children (2 years old), - 4 parents.	- Action research based on observation and documentation - Training based on the needs of the staff	- Evolution in the view of children from 'spectators' towards 'participators' - Reconceptualization of the role of play in early learning from something children naturally do (without the involvement of the adults) towards something that gives children the possibility to intervene directly in the every-day life - Abandoning an academic pedagogy; which implied changing practices based on listening to the child: e.g. the educational environment (space and time) and the planning and assessment

		educational contexts.				practices.
Craveiro (2007). Training in context: a case study in early childhood pedagogy. (Translation from Portuguese)	Portugal	Investigate the professional development process of a group of preschool teachers from a particular setting involved in a collaborative project ('Training in context') aiming at improving the quality of education for children.	1 private non-profit ECEC setting with crèche, pre-school and after school activities.	- 4 Pre-school teachers in 2001-2002 - 3 Pre-school teachers in 2003-2004 - All Pre-school teachers worked with children aged 3-6 - 39 children in 2001-2002 - 30 children in 2003-2004	- 'Training in Context': based in a supportive process of a supervisor (or critical friend) - The training specifically tackled 'difficult' issues for the teachers: e.g. planning and assessment of children's product and learning, project work, optimising space, time and group organization and improving interactions. - Duration: 4 academic years.	- Changes in the team climate: more openness to share and to collaborate, more team work between teachers and auxiliary staff, and between teachers mutually - turning into a more open and inclusive ethos, eager to improve quality, less defensive, pro-active in problem solving and in formulating challenges. - Teachers started to do planning based on child observations and the started to collect evidence of children's learning in individual files. They also started to report these assessments to parents. - Improved observation skills
Hayes et al. (2013). Evaluation of the	Ireland	- Investigate the impact of the CDI Early Years	ECEC services in a disadvantaged	Not clear: Roughly 6-8 practitioners attended each focus	- The Childhood Development Initiative (CDI): a 2-	- The HighScope training was the most significant aspect of

Early Years Programme of the Childhood Development Initiative		programme on children's outcomes, parental stress and parent estimation of child social skills and behaviour. - Investigate the impact on outcomes in terms of environmental quality. - Examine the process of programme implementation.	district of Ireland	group and multiple sessions were held to facilitate the attendance of as many practitioners as possible. 1 practitioner from the intervention group participated in a focus group, once at the end of each year. Other relevant personnel (CDI speech and language therapists, CDI staff and programme trainers) were interviewed and/or consulted	year programme targeted at children and their families in Tallaght West. It consisted of: - direct provision, of a low-cost, flexible and broad-based curriculum operating within the principles of HighScope for 4 hours 15 minutes per day, 2 years - minimum qualifications of FETAC Level 5 in childcare or equivalent - observation of children's learning	the programme. - After one year, practitioners felt more confident and they were more satisfied. - The first year of the programme should be considered a 'bedding-in period'. - By training practitioners and offering an SLT service to Early Years children, children with speech and language needs were identified and treated at an early age. - Communities of Practice meetings were identified as very supportive. It helped the practitioners to reflect and it gave them a sense of how manual implementation was progressing in other services.
Johansson et al. (2007). Practitioner-oriented research as a tool for professional development.	Sweden	- Analyze how directed research could be used as a tool for professional development in the preschool. - Facilitate change, improvement and development in the	2 local authorities	Fifteen working teams consisting of 44 staff (33 preschool teachers and 11 day care attendants)	- Participatory research: collaboration between researchers and the working team in preschools to facilitate development of knowledge in their local setting. - After an	- Increased use of networks to share experiences and to learn from each other. - Network-based work promotes a widening of perspectives, to see things in a new light and through new glasses.

		local practice of the preschool.			introduction, each working team formulated their own theme that they wanted to do research on.	- Research is seen as a possible source to legitimise the ongoing work by confirming the things that work out fine. - Research and developmental work is seen as a tool to make daily work more exciting, stimulating and varied, which promotes pleasure in the work. - Research is regarded as contributing to developing, changing and improving the general work done in the preschool sector. - The increased importance of seeing the management is regarded as a potential way to develop the pedagogical dialogue between the working team and the management.
Jopling et al. (2013). The Challenges of Evaluation: Assessing Early Talk's Impact on Speech Language and Communication Practice in	United Kingdom	Provide impartial evidence of how the Early Talk programme has influenced staff and enhanced their ability to provide high-quality speech and language and communication support for preschool children in children's	14 children's centres	Not explicitly stated: all practitioners working in the 14 children's centres were involved.	- Early Talk (ET): Early Years' intervention programme designed to improve speech, language and communication outcomes for children aged 0-5 by focusing on enhancing practitioners'	- The findings demonstrate that, in broad terms, the more experienced practitioners felt that ET reinforced and validated existing good practice, while the less experienced were encouraged by the ET project to improve their knowledge and understanding of SLC.

Children's Centres.		centres settings.			knowledge and skills.	- Practitioners felt that ET developed both their procedural knowledge and their propositional knowledge - Increasing confidence about knowledge - Development of consistent behaviour and skills in the centres through challenging existing processes - Several centres developed greater use of resources to support communication with all children, not just those with SLC difficulties - Improved staff-child interactions following the implementation of ET.
Leal (2011). Educating the citizen from kindergarten: the contribution of early childhood educators' assessment practices in collaboration with the family	Portugal	Analyze the impact of an in-service 50h course about child assessments and parental involvement.	Private non-profit ECEC setting; children aged 0-6	- 17 parents - 6 teachers (3 working in crèche; 0-3 and 3 working in preschool; 3-6).	- Educational programme for ECEC practitioners, involving 50 hours of assessment of competencies - Action research - Supervision	- Impact on the learning assessment practices at a micro level: decisions made in the activities room. - At a meso level: decisions made within the institution.

(Translation from Portuguese)						
Lino (2005). From academic training to training in context: an innovative path to the reconstruction of early childhood pedagogy. (Translation from Portuguese).	Portugal	Evaluate the impact of in-service teacher training on preschool teachers' professional development, the quality of the educational contexts and children's learning.	40 pre-school classrooms either from state pre-schools or private non-profit pre-schools.	- Two groups of 20 pre-school teachers each belonging to each type of CPD program (A and B). - All teachers (all female) have 5 or more years of experience. - 320 children from 40 classrooms	2 specialised in-service courses (CESES). - Course A is a context based training with an emphasis on ECEC pedagogy with its varied dimensions and supervision of the pre-school teachers. - Course B is a traditional one, with an emphasis on academic subjects from one curricular area; it perceives professional development as an individual process based on acquiring sound theoretical foundations without a concern about the context.	- Better quality of practice in group A, independently from the academic level of the teachers. - Teachers highlight the importance of learning about different ECEC pedagogies - Teachers emphasize the importance of reflective processes; informed by theoretical references. - Child involvement in adult initiated activities was higher in group A. - The study highlights that not all kind of training is a guarantee for children's learning.
McMillan et al. (2012). Changing	Ireland	Evaluate the implementation of the	5 settings: two infant classes,	- 5 practitioners working within	- Professional Development Model	- Implementation of the PDM has benefits at personal and

Mindsets: The Benefits of Implementing a Professional Development Model in Early Childhood Settings in Ireland.		'Professional Development Model' (PDM).	one daycare, two sessional playgroups	these settings and the children attending these settings	(PDM): constructed on a socio-cultural theoretical framework whereby Vygotsky's zone of proximal development was applied in the context of early years professional development. - Over a 16-working-week period	professional development levels and also at early years setting level. However, benefits to the early years professional community were limited. - Increased pedagogical awareness - Greatest impact on the quality of the teaching strategies of the practitioners. - Not all settings benefited to the same extent from implementation of the PDM.
Menmuir and Christie (1999). Encouraging professional reflection in early education.	United Kingdom	Examine the use of the Repertory Grid Technique to aid the reflection of ECEC professionals.	Different settings: - early stages of primary school - nursery classes - children's centres or family centres	- 7 practitioners who attended one of the postgraduate modules of the DipEE award during session 1996-97	- Repertory Grid Technique: derived from personal construct theory as a tool to aid the reflection of teachers and other professional working in Early Education. - 'Children's Development and Learning' - module, which formed part of a continuing professional development postgraduate award in	- Participants stated that they felt the Rep Grid had been a useful but challenging exercise. - Increased skills in critical reflection - The complexity of the participant's set of constructs concerning children increased from the first to the second grid completion exercise. - It was clear that all participants had found that the exercise had 'made them think' more about the children or

					Early Education.	think about them in different ways.
Oliveira-Formosinho and Araújo (2011). Early education for diversity: starting from birth.	Portugal	- Identify the main characteristics of a pedagogical approach that are most effective in the promotion of respect for diversity.	Not stated	- 6 early childhood teachers	- Pedagogical perspective for early childhood education and teacher training. - Context-based teacher education approach. - Process of conscientisation (Freire, 1970)	Not stated
Peeters (1993). Quality improvement in the childcare centers with the support of the Bernard Van Leer Foundation (Translation from Dutch)	Belgium	The article reports about the results of the investments, made by the Bernard Van Leer foundation. During 13 years, different studies and projects were undertaken by staff members of the Van Leer projects.	Preschools Family Day Care	Not stated	- Training - Pedagogical guidance - Supervision	- Increase in the variety of activities and playthings - Improvements in staff-child interactions: more individualized approach - Improvements in the furnishing of the playing space - Noticeable progress with regard to the accessibility of the playthings - Improvements in parental involvement (e.g. increase in organizing parent get-togethers) - In the first year, there is a lot of resistance towards change.

						Results occur from the second year onwards.
Peeters and Vandenbroeck (2011). Childcare practitioners and the process of professionalization.	Belgium	- Illustrate the evolutions in childcare workers' professionalism and professionalization processes in Flanders by analysing the data collected through 30 years of action-research carried out within the Department of Social Wefare at Ghent University	Not stated	In total, 30 documentaries, featuring 84 practitioners, 23 parents and six children were analysed by the researchers.	- Participatory research: working as 'actors of change' - Action research	- The staff members' narratives demonstrate that being involved in a process of change, gives them hope and self-confidence, and increases their job satisfaction. - Major changes in professional attitudes towards the parents. Improvements in parental involvement, aiming to increase the wellbeing of the children. - Action research, raises the possibility of questioning the social position of research. Practitioners may be identified as 'actors of social change' as they, together with the researchers, played an active role in a process of change that aimed to increase the level of professionalization over the past 30 years. - Dealing with diversity presents the early years practitioners with complex problems that cannot be solved with a technical body of knowledge, since they ask for interpretations of professionalism based on continuous reflection on their

						practice as well as the need to move beyond reflection and develop the ability to be reflexive.
Peixoto (2007). The physical sciences and laboratory activities in preschool education: diagnosis and evaluation of the impact of a training program for early childhood educators. (Translation from Portuguese)	Portugal	Evaluate the impact of an in-service training programme	14 state preschools	16 preschool teachers, working with children of 3-6 years old	In-service training programme: 11 sessions of 2 hours, containing: - Theory: pedagogical issues - Practice - Reflections + group learning - Implementation project	- The overall evaluation of the programme showed that teachers overcame most of their initial conceptual and methodological difficulties; - The facilitator role of the teacher educator (supervisor) was a crucial factor for the change of teachers' practices; participants' conceptions about lab activities and their use in science teaching developed in such a way as they got closer to the conceptions accepted by the specialists in this area.
Picchio et al. (2012). Documentation and analysis of children's experience: an ongoing collegial activity for early childhood professionals.	Italy	- Elaborate and implement documentation procedures that nido practitioners can accomplish continuously and that can form the basis of a collegial reflection on children's experience and the improvement of practices.	Nido's in Pistoia	- Pedagogic coordinators in Pistoia, - 7 nido practitioners, and - 5 researchers from the research agency	- Action research - Documentation	- Change of focus: this meant that teachers needed to focus their attention on significant elements underlying the flow of everyday life in the nido rather than on the behaviour of individual children or on specific moments of everyday life. - Systematic documentation, analysis and evaluation of

						educational practices can be a powerful tool of continuous support to the professionalism of early childhood education practitioners - Improvements in critical thinking
Potter and Hodgson (2007). Nursery nurses reflect: Sure Start training to enhance adult child interaction.	United Kingdom	- Explore the impact of a training approach designed to improve both the reflective practice and knowledge of nursery nurses in the area of adult child interaction (ACI).	2 Sure Start children's centres	- 5 Nursery nurses - The course was delivered to five staff working within a Sure Start programme in the north of England	- Structured training intervention programme: The Adult Child Interaction (ACI) course: The ACI course consisted of 12 sessions, six of which took the form of two-hour teaching sessions, during which training was delivered on key aspects of language and communication supported by the viewing of practice video clips of staff interacting with children. The other six sessions, delivered on alternate weeks, took the form of work-based support visits during which the SLT observed staff practice informally in their	- The work-based visits helped practitioners to make vital links between theory and practice within their own setting: - A focus on enabling children to take a greater lead in individual interactions - Changing role of staff: acting more as facilitators rather than directors of play sessions. - Staff began to challenge their own ways of working as a result of viewing video clips of their practice - Staff began to engage in a process of critically reflecting on their practice in a number of important ways - The viewing of videotapes in group was particularly helpful in generating new critical insights, especially in later training sessions when staff

					early years settings, providing supportive comment and advice linking practice to formal training.	had become more skilled at being able to identify, understand and challenge what they were seeing.
Richter (2012). Teaching competence of preschool teachers in the field of natural science. A quantitative and qualitative study of competence development in the context of an advanced training programme. (Translation from German)	Germany	- Study the effectiveness of the training program "Versuch macht klug" in enhancing teachers' competency to support children in their exploration of natural scientific phenomena. - The study evaluates whether the training had an effect on dispositions and personal, communicative, motivational, methodical and practical competencies as measured through self-assessment.	Day care centres in Schleswig-Holstein	24 ECEC practitioners were interviewed, six months after the training intervention	- The intervention is specifically directed towards improving staff competency in enhancing science education in day-care centres in the context of the training program "Versuch macht klug" ('Learning by doing') - The training intervention programme follows a 4 days curriculum. It stimulates teachers' own explorative learning and a positive attitude towards sciences and experiments.	- As a result of the training, teachers experienced a positive development with regard to interest, frequency of experiments, self-concept, expertise and methodical skills. The effects persisted also 6 months after the training intervention. - Results showed that teachers successfully developed individual ways to integrate sciences into their work with children. - Time and age of the children however were seen as restricting factors.
Rönnerman (2003). Action research: educational tools and the improvement of practice.	Sweden	- Discuss an in-service training project. Explore in what way educational tools in an action research project can be useful in	- Early childhood teachers - One group of six work teams each work team	The area, chosen for this project, has about 30 pre-schools and is an area where many immigrants with different cultures	- Action Research was used as an in-service training connected to the curriculum - Documentation	- The teachers became more aware of how they were interacting with the children. They now let the children take more room and were not so eager to teach them but to let them try for themselves from

		teachers' improvement	consisted of 3 people. = 18	and different languages are living.		their own level of Knowledge. - Data also shows that daily work is no longer only pre-planned but now more open to the children's needs and ideas that arise during the day. - Exchanges between the work teams in the same pre-school have evolved where they share ideas. They have become aware of new perspectives, and exchanged ideas and practical examples to be used in their own setting. - The teachers stress that they have learned a lot, which they express as a greater awareness and self-confidence in work, and a greater belief in themselves. - By observing and questioning their own practices, the teachers find that they feel more secure in labelling what they are doing, which in turn contributes to their expressions in talking with colleagues and the children's parents
Rönnerman (2008). Conscious quality	Sweden	- Investigate and follow up the possible	Preschool centres from 7	- 114 preschool teachers from 7	- Action Research	- Impact on quality: the preschool teachers felt that

work. Follow up of course Q in preschool and the implications for preschool teachers in their daily practice.

(Translation from Swedish) | | implications for practice of preschool practitioner's participation in an action research course.

- Search for critical elements that may be crucial for such courses when it comes to impacts on development and thus on the quality of the preschools. | municipalities | municipalities participated in the course

- 114 preschool teachers participated in the follow up questionnaire | Course | they made use of the knowledge and skills (tools) they acquired from participating in the action research course which they felt led to quality improvement in the preschools. |
| Share et al. (2011). Developing early years professionalism. The evaluation of the Early Learning Initiative's professional development programme for community childcare settings in the Dublin Docklands. | Ireland | - Analyse to what extent awareness has been raised amongst childcare practitioners about parental involvement in children's learning.

- Describe which elements of the PICL training worked best, and for which groups. | - Dockland community childcare centres | - The childcare providers participating in this evaluation are a diverse group, but have some features in common that affect both the extent to which parents engage with the centres and

their child's learning and the expectations that they have of the | - Parental Involvement in Children's Learning Training: - The PICL framework offers a specific methodology where practitioners and parents adopt a partnership approach to systematically documenting, planning and extending children's learning through sharing child development concepts. It positions | - Staff are becoming being more deliberate in their approach to involving parents and are being more reflective on their own practice in this regard.

- Encouragement of children's autonomy

- A clearer focus on learning through play.

- All centres have introduced a portfolio for each child, and this was described as a major change in practice as a result |

				education system. - They are providers in poor areas	the parental role as learner and educator. The framework promotes a continuous two-way flow of information from early years setting to home and from home to setting.	of the PICL training, and one that is very likely to be sustained in the future. - A challenge facing centres is insufficient non-contact time to develop and update the portfolios. - A supportive network of centres and practitioners has emerged - Increase in one-to-one time between staff and children
Sheridan et al. (2013). Systematic quality-work in preschool.	Sweden	- Investigate the meaning that Swedish preschool teachers ascribe to systematic quality work - The question addressed is, how do teachers talk about systematic quality work in relation to children's learning and development and to preschool quality?	Swedish preschools	- The sample consists of 15 preschools in the country's two major cities, Stockholm and Gothenburg, and 15 preschools from the rural area of Malardalen in mid-Sweden. - The participants' professional experience ranged from just a few years post-qualification, to over 40 years in the	- Pedagogical documentation: documentation of the relationship between the child, the environment, and the teachers' approaches - Systematic Quality Work	- Shift in the foci of documentation, from a narrative description of preschool activities to documentation of children's learning, required a development in their own competence to observe and to document children's learning. - Documentation is also used as a tool for teachers to see their own competence and to guide them in their work. It helps them to see that they are doing the right things with the children, which in turn makes them feel confident in

				profession.		themselves. - Documentation can be interpreted as a tool empowering teachers to critically analyse their own work in relation to the objectives of the curriculum - Documentation helps practitioners to create better conditions for children's learning and development in preschool.
SQW (2012). Evaluation of the 3,4,5 Learning Years Services Youngballymun.	Ireland	- Investigate the impact of the 3, 4, 5 Learning Years Service on practitioners and on the quality of preschool provision in Ballymun	Preschool settings that have engaged with the, 3, 4, 5 Learning Years Service	- 8 Preschool settings	- 3,4,5 Learning Years Service - HighScope: Evidence based curriculum - Siolta: Quality framework for ECEC in Ireland.	- Marked changes in both the environment and in children's ability to make choices, express their ideas, experiment, solve problems, act independently, engage in learning, communication with each other and with practitioners - Improved child outcomes: literacy, numeracy, school readiness - Improved staff-child interactions - Greater time allocated to free play and fun activities - Engagement with HighScope

						was giving practitioners more confidence in their work - The training received and coaching support from the HighScope coordinator encouraged practitioners to do things differently, which they could see was of benefit to the children. - Increased staff skills and ability to reflect upon practice - More effective team work
Van Keulen (2010). The Early Childhood Educator in a Critical Learning Community: Towards Sustainable Change.	The Netherlands	- Investigate how sustainable change within childcare-providing organisations can be created. - Investigate how a learning process with early childhood educators (+ collective team learning can be created. - Investigate how wide support for innovation and change at every level of childcare-providing organisations can be	- 4 childcare providing organisations	- Educators, middle managers and staff members - In the project, 60 educators and 10 managers were trained for a period of 10 months. - The educators in the action research project qualified in the Netherlands at a vocational training level	- Action–training–research: In the action–training–research project, the model for sustainable learning in the professional learning community was co-constructed with 4 childcare-providing organisations	- Increase in reflective skills - Increase in group reflection - The educators learned to formulate their own learning targets based on their questions and dilemmas and to document their actions and results. - Educators began to see a larger picture: the location and function of their own organisation in its neighbourhood. This awareness of the context furthered cooperation with parents and the neighbourhood.

		created.				- In order to realise the new learning methods the professionals needed intensive coaching.
Vonta et al. (2007). Mentoring in the professional development of a teacher and a preschool teacher. (Translation from Slovenian)	Slovenia	- Analyze the principles of life-long learning as a continuous process. - Improve the quality of preschool teachers' work by enabling and developing teams of mentors who support the professional workers in their work and life-long learning.	Preschool settings	- Preschool teachers (mentors and practitioners) - 12 preschool settings	- Portfolio - Mentoring - Self-evaluation - Self-reflection - Use of ICT	In the teachers' opinion, the quality of self-evaluation and self-reflection is closely related to the professional knowledge. They recognize a professional portfolio as an important tool for sustaining professional development.
Vujičić (2008). Research and Improvement of One's own Practice – Way to Development of Teachers'/preschool teachers' Practical Competence.	Croatia	Train preschool teachers for the research and improvement of their own practice, and for direction of their own professional development within the process of lifelong learning	Preschools of the Istra County, coming from Pula (2), Labin, Poreč, Rovinj and Pazin	- 12 Preschool teachers of the Istra County, and 1 researcher. - 2 preschool teachers coming from each nursery school were involved in the action research	- Action Research	- Preschool teachers initiated changes in their physical environment in another way. They started to bring various materials for playing (unshaped materials) - When the preschool teachers freed themselves from jitters, they started to breathe more freely, change their environment more independently and daringly, and observe the way how these changes were experienced by their children.

						- The quality of staying in the nursery school has increased by the introduction of self-service meals and not obligatory sleeping.
Wood and Bennett (2000). Changing theories, changing practice: exploring early childhood teachers' professional learning.	United Kingdom	Provide understanding of what actually happens in classrooms by exploring the relationship between teachers' theories of play and their practice, and the reasons for any discontinuities.	7 schools in the southwest of England, 3 in rural and 4 in urban areas.	- 9 ECEC Teachers of varying experience - 4 of the teachers taught mixed-age classes: 1 nursery/ reception (3/4-4/5), 2 reception/Year 1 (age 4/5-5/6) and 1 reception/Years 1 and 2 (age 4/5-5/6-6/7). - Four of the teachers were novices, and five were experienced.	- Participatory research	- As an unintended outcome of their close involvement in the data collection and analysis, all of the teachers changed their theories, or practice, or both - Changing views on training - Changing views on what children do - Improvements of practice and daily planning - Improved play experiences in the classroom - Positive development in professional knowledge - Provision of quality learning through play

Annex 6: Details of CPD views studies: methodology

Author, date, title	Study design summary	Sample	Data collection methods	Data analysis methods
Ang (2012). Leading and Managing in the Early Years: A Study of the Impact of a NCSL Programme on Children's Centre Leaders' Perceptions of Leadership and Practice.	- Qualitative	- 359 ECEC practitioners; stratified sampling strategy, based on two main categories of stratification. First, in terms of the cohort of participants who graduated from the NPQICL. In this case, it was decided that the first cohort of students who undertook the NPQICL in 2005/6 would be the target population. The second stratification category was the geographical spread of children's centres, and the third stratum, the context of settings such as rural or urban.	- Questionnaire - Follow up interviews (semi-structured)	Not stated
Asplund Carlsson et al. (2008). From doing to learning and understanding. A study of teacher's learning within the aesthetic domain. (Translation from Swedish)	- Qualitative	- 9 teams of ECEC professionals	- Interviews - Observations	- Discourse Analysis
Aubrey et al. (2012). Enhancing Thinking Skills in Early	- Qualitative - Case study approach using 2	4 schools in two local authorities (LAs), in England and Wales; two urban and two rural, mono-cultural and bilingual.	- Interviews - Observations	- General inductive approach: Analysis was sequential, proceeding from analysis of national curriculum documents

Childhood.	sites	- 12 children (5 - 6 years old) - Teachers, head teachers and advisors		to programme material, through interviews with professionals, to lesson observation analysis and reflections. - Interview data were analysed at the first level, using a priori categories derived from the questions that were asked and at the second level, with grounded categories emerging from these first-level categories through a process of constant comparison of instances and events.
Bleach (2013). Using action research to support quality early years practice.	- Qualitative - Action Research	- Staff working in early childhood services in Ireland - 14 community-based ECCE centres	- Observations - Documentation - Field notes	- Thematic Analysis
Blenkin and Hutchin (1998). Action research, child observations and professional development: some evidence from a research project.	- Qualitative - Action Research	The project's action researchers mainly worked in nursery settings with under fives	- Observations - Interviews - Group reflection - Documentation	- Phenomenological Analysis - As part of the evaluation process both the research associate and the action researcher examined some of the collected evidence together, so that two views could be given on one piece of evidence.

				Further support came through establishing networks of action researchers where they met to discuss their action research.
Cardoso (2012). Creating contexts for quality in childcare: playfulness and learning. (Translation from Portuguese)	- Qualitative - Action Research - Case Study	1 private non-profit ECEC centre (community crèche (0 -3)) Core participants: - 4 pre-school teachers, - 8 auxiliary staff, - 7 children (2 years old), - 4 parents	- Observations of children - Interviews with teachers, children and parents - Documentation	- Framework 'Thematic' Analysis: a priori themes such as beliefs, values and knowledge; practical actions; transformations - The analysis was also inductive taking on board emerging issues and categories.
Craveiro (2007). Training in context: a case study in early childhood pedagogy. (Translation from Portuguese)	- Mixed method (only qualitative part included) - Action Research - Case Study	1 private non-profit ECEC setting with crèche, pre-school and after school activities. - 4 Pre-school teachers in 2001-2002 - 3 Pre-school teachers in 2003-2004 - All Pre-school teachers worked with children aged 3-6 - 39 children in 2001-2002	- Interviews with professionals, parents and children - Participant observation - Diary study - Documentation	- Documental analysis - Framework 'Thematic' Analysis

		- 30 children in 2003-2004		
Hayes et al. (2013). Evaluation of the *Early Years* Programme of the Childhood Development Initiative	- Mixed method: a quantitative assessment of the programme (Randomized Controlled Trial) and a qualitative assessment of the implementation 'process'.	Not clear: roughly 6-8 practitioners attended each focus group and multiple sessions were held to facilitate the attendance of as many practitioners as possible. 1 Early Years practitioners from the intervention group participated in a focus group, once at the end of each year.	- Process evaluation via consultation with parents, Early Years practitioners and CDI staff. - Focus groups with practitioners - Documentation: minutes, progress reports, manuals - Interviews	Not stated
Johansson et al. (2007). Practitioner-oriented research as a tool for professional development.	- Qualitative - Mixed method: two questionnaires and one interview	Fifteen working teams consisting of 44 staff (33 preschool teachers and 11 day care attendants) from 2 local authorities in Sweden.	- Questionnaires - Interview - Focus group	- Constant Comparative: analysis is based on questionnaire and interviews in transcript-based form. The data processing was initiated with a read-through of all questionnaires and interview transcripts. The parts of the statements which were off topic were omitted, and so were recurring statements.

Jopling et al. (2013). The Challenges of Evaluation: Assessing Early Talk's Impact on Speech Language and Communication Practice in Children's Centres.	- Qualitative - Multi-method evaluation	14 children's centres; divided into 3 groups outlined according to their stage of ET implementation. The centres were situated in a range of locations across England. 9 of the centres (64%) were located in the 30% most disadvantaged areas of England	- Case study: used to disseminate the findings of the research and to provide additional data - Interviews (telephone + face to face) - Focus groups - Observations - Documentation - Questionnaire - Mapping of likewise initiatives	- Cross-case analysis was undertaken to identify additional themes - The data were then analysed thematically using an iterative and evolving process consistent with grounded theory
Leal (2011). Educating the citizen from kindergarten: the contribution of early childhood educators' assessment practices in collaboration with the family (Translation from Portuguese)	- Qualitative - Action Research	- 17 parents - 6 teachers (3 working in crèche; 0-3 and 3 working in preschool; 3-6).	- Interviews - Case Study - Participant observations - Supervision	- Documental Analysis
Lino (2005). From academic training to training in context: an	- Mixed method (only qualitative part	- Two groups of 20 pre-school teachers each belonging to each type of CPD program (A	- Observations - Semi-structured	- Thematic Analysis

innovative path to the reconstruction of early childhood pedagogy. (Translation from Portuguese).	included) - Comparative evaluative case-studies	and B). - All teachers have 5 or more years of experience. - 320 children from 40 classrooms either from state pre-schools or private non-profit pre-schools.	interviews	
McMillan et al. (2012). Changing Mindsets: The Benefits of Implementing a Professional Development Model in Early Childhood Settings in Ireland.	- Qualitative	- 5 settings: two infant classes, one daycare, two sessional playgroups - 5 practitioners working within these settings and the children attending these settings - Recruitment: not stated - Sampling frame: not stated	- Case-study interviews, - Reflective diaries - Observations of the settings using the quality learning instrument to evaluate the quality of the learning experience before and after using the PDM - Assessment: The quality learning instrument (QLI)	- Thematic Analysis - Comparison with pre- and post evaluation using the QLI
Menmuir and Christie (1999). Encouraging professional reflection in early education.	- Qualitative	- 7 practitioners who attended one of the postgraduate modules of the DipEE award during session 1996-97 - Practitioners were drawn from a range of early years backgrounds with some working at the early stages of primary school with children aged 5 and 6 years, some in nursery classes for 3- to 5-year-olds and others	- Case Study - Semi-structured interviews - Dairy studies - Rating	- Content Analysis - A range of factor analytic procedures: FOCUS (cluster) analysis and PRINCOM (principal components) analysis were performed on both sets of participants' grids, those from the beginning of the module

		working in children's centres or family centres with responsibility for children from 0 to 5 years.	- Group discussion	and those from the end
Oliveira-Formosinho and Araújo (2011). Early education for diversity: starting from birth.	- Qualitative - Multi-context case study	- 6 early childhood teachers - Sampling frame not stated	- Case study	- Not stated
Peeters (1993). Quality improvement in the childcare centers with the support of the Bernard Van Leer Foundation (Translation from Dutch)	- Qualitative	Not stated	- Interviews - Observations - Questionnaires - Dairy study - Focus groups	Not stated
Peeters and Vandenbroeck (2011). Childcare practitioners and the process of professionalization.	- Qualitative - Action Research	- The practitioners, parents and children in the videorecording analysed took part in one of the 11 action-research project carried out by the Department of Social Welfare of Ghent University - The researchers recruited practitioners who	- Video documentaries - Observations - Interviews	- 30 documentaries, featuring 84 practitioners, 23 parents and six children were analysed. The focus of the analysis is on the 'little narratives' (Lyotard, 1979) of the actors of change

		had reflected on the problematic situation and had experimented successfully with the problem.		themselves. - Specific method not stated
Peixoto (2007). The physical sciences and laboratory activities in preschool education: diagnosis and evaluation of the impact of a training program for early childhood educators. (Translation from Portuguese)	- Qualitative	- 16 preschool teachers	- Interviews - Observation	- Document Analysis
Picchio et al. (2012). Documentation and analysis of children's experience: an ongoing collegial activity for early childhood professionals.	- Qualitative - Action Research	- A research group was set up, comprising the pedagogic coordinators in Pistoia, 7 nido practitioners, and 5 researchers from the research agency. - A cascading procedure, which was inscribed within a framework of in-service training, provided the involvement of all the Pistoia nido practitioners in the action research.	- Group discussions - Documentation - Report writing	- Narrative analysis: All the discussions made during the 11 research group meetings (n and the 3 general meetings were recorded and entirely transcribed.
Potter and Hodgson (2007). Nursery nurses reflect: Sure Start training to enhance adult child interaction.	- Qualitative	- 5 nursery nurses working in Sure Start children's centres	- Focus groups - Semi-structured interviews - Pre- and post-training	Analysis of pre- and post-training videotape

			video clips	
Richter (2012). Teaching competence of preschool teachers in the field of natural science. A quantitative and qualitative study of competence development in the context of an advanced training programme. (Translation from German)	- Quasi-experimental panel design involving a control group The quantitative survey was complemented by qualitative interviews - Only qualitative part included.	- 24 ECEC practitioners were interviewed, six months after the training intervention. - Day care centres in Schleswig Holstein.	- Semi-structured interviews	- Qualitative content analysis
Rönnerman (2003). Action research: educational tools and the improvement of practice.	- Qualitative - Action research	- Thirty work teams from pre-schools had access to in-service leaders for two-and-a-half years with the aim of improving their practice. To carry out an effective evaluation, the researcher followed one group of six work teams by interviewing them and collecting an individually written survey once a year	- In-depth interviews - Focus groups - Diary study - Observations - Documentation	Not mentioned
Rönnerman (2008). Conscious quality work. Follow up of course Q in preschool and the implications for preschool teachers in their daily practice.	- Qualitative - Web based questionnaire	114 ECEC professionals from 7 municipalities: - Preschool teachers	- Web based questionnaire	- SPSS - Thematic Analysis

		- Nursery Nurses - 12 Heads of preschools		
(Translation from Swedish)				
Share et al. (2011). Developing early years professionalism. The evaluation of the Early Learning Initiative's professional development programme for community childcare settings in the Dublin Docklands.	- Qualitative - Participatory research	- 5 childcare centres: including managers, childcare staff and children within these centre - A research reference group was formed comprising childcare practitioners from the five centres, and the two key CRC researchers.	- In-depth interviews - Focus groups - Observations - Documentation - Questionnaire	- Thematic Analysis - Data analysis commenced as soon as data was collected. It consisted of processing information, reflecting upon it, discussing it among the research team and feeding back insights and issues for clarification to the Research Reference Group.
Sheridan et al. (2013). Systematic quality-work in preschool.	- Qualitative	- 30 preschools - Both of the two urban regions and the rural area have been stratified to represent districts that differ geographically, demographically, ethnically, and which include a variety of socioeconomic structures. - The principal of each preschool was asked to select the participating classes and teachers on the basis of both the competence of the teacher and the teachers' own interest in participating.	- Semi-structured interviews conducted at the teacher's workplace (60-120min) - The teachers were asked to describe the ways in which they gain knowledge of children's learning and development in relation to curriculum objectives.	- Abduction: the analyses focussed on how the teachers talk about systematic quality work in relation to their competence, approaches, children's learning and curriculum objectives. - All of the interviews were read and studied repeatedly. - The analyses were continuously related to interactionist and ecological theories and research on the documentation and evaluation of preschool quality.

SQW (2012). Evaluation of the 3,4,5 Learning Years Services Youngballymun.	- Qualitative	All 8 of the preschool settings that have engaged with the, 3, 4, 5 Learning Years Service agreed to participate in our research.	- Semi-structured interviews - Observations - Questionnaire - Assessment	- Realistic evaluation (to explore people's assumptions about what works and why – and in what circumstances) - Baseline Preschool Programme Quality Assessment (PQA) which evaluates the extent to which the curriculum is being delivered with fidelity.
Van Keulen (2010). The Early Childhood Educator in a Critical Learning Community: Towards Sustainable Change.	- Qualitative - Action Research	- Educators, middle managers and staff members of 4 childcare providing organisations	- In-depth interviews - Diary studies	Not stated
Vonta et al. (2007). Mentoring in the professional development of a teacher and a preschool teacher. (Translation from Slovenian)	- Qualitative - Action research - Development research	- 12 preschools - Professionals were divided in two groups: mentors and mentorees	- Questionnaire - Evaluation during mentoring process	- Frequencies, structural shares and $\chi 2$ were used to analyse the data.

Vujičić (2008). Research and Improvement of One's own Practice – Way to Development of Teachers'/preschool teachers' Practical Competence.	- Qualitative - Action research	- 12 teachers of the Istra County, and 1 researcher. - 2 preschool teachers coming from each nursery school were involved in the action research	- Observations - Group discussions	- The observation and video recording of educational practice, as well as shared analysis and discussion on the implemented activities took place every month (6 meetings altogether) - The video recordings of the discussions held in every nursery school served us as a basis for documenting the context and process of learning - The monitoring of the preschool teachers' work and complete atmosphere in the nursery schools was followed by analyses (discussions)
Wood and Bennett (2000). Changing theories, changing practice: exploring early childhood teachers' professional learning.	Qualitative	- Nine teachers of varying experience participated in the study throughout one school year - They had been identified by colleagues and local education authority advisers as committed and capable practitioners in the use of play activities	- Semi-structured interviews - Observations - Documentation - 1 pre-observation questionnaire - 3 Group discussions	- Grounded theory approach - Content analysis: to reveal patterns and layers of understanding - Constant comparative technique: to identify categories and sub-categories - From the narrative accounts, an initial map of key concepts and theories was designed. 7 broad categories emerged and were discussed with the teachers at the first group meeting.

				- These categories informed the design of the semi-structured interview schedule. - The interviews were transcribed and subsequently analyzed independently by two researchers - The resulting interpretation was discussed and verified at the second group meeting

Annex 7: Details of WC views studies: study characteristics

Author, date, title	Country	Aims and methods	Settings	Sample characteristics	Details of WC studied
Blatchford et al. (2001/2002). Relationships between Class Size and Teaching: A Multi-method Analysis of English Infant Schools.	United Kingdom	- Explore the relationships between teaching and class size through the use of methods that capture teacher experiences and through detailed case studies. - Data comes from longitudinal research Class Size Project, involving two large cohorts.	330 classes in cohort 1 (199 schools under 9 local education authorities); 212 classes in cohort 2 (134 schools under 6 local educational authorities).	Data reported in this study comes from questionnaires completed by: - 151 reception teacher (cohort 2) in 1998; - 130 Year 1 teachers (cohort 1) in 1998; - 130 Year 1 teachers (cohort 2) in 1999; - 153 Year 2 teachers (cohort 1) in 1999.	- Class size.
Sandstrom (2012). The characteristics and quality of pre-school education in Spain.	Spain	Explore the structural and process quality of pre-school classrooms in the Spanish city of Seville and the perspectives of classroom teachers towards the implementation of a universal preschool programme.	25 four-year-old pre-school classrooms from 15 pre-schools (including public, private and faith-based)	- Teachers working at 25 four year old pre-school classrooms (all but one teacher was female);	- Staff: child ratio; - group size; - facilities and resources; - support staff; - bureaucracy; - curriculum; - in-service training opportunities.

Annex 8: Details of WC views studies: methodology

Author, date, title	Study design summary	Sample	Data collection methods	Data analysis methods
Blatchford et al. (2001/2002). Relationships between Class Size and Teaching: A Multimethod Analysis of English Infant Schools.	Mixed method	- 151 reception teachers (cohort 2) in 1998; - 130 Year 1 teachers (cohort 1) in 1998; - 130 Year 1 teachers (cohort 2) in 1999; - 153 Year 2 teachers (cohort 1) in 1999.	- Teacher end-of-year reports; - case studies of individual classes; - teacher estimates of time allocation; - systematic classroom observations.	Framework "thematic" analysis: - Coding frame was developed on the basis of an initial analysis of 50 of the 1998 questionnaires and 20 of the 1999 questionnaires. Answers were read through, and categories were devised that captured the most frequent themes. There were 19 categories in all. Categories coded for each teacher were then entered into SPSS.
Sandstrom (2012). The characteristics and quality of pre-school education in Spain.	Mixed method	- 15 ECE coordinators - 25 classroom teachers	- Semi-structured interviews	Framework "thematic" analysis: - All interviews were conducted in Spanish and recorded for later translation. Data analysed using NVivo 9.0 software to identify and code similar themes across participants

Annex 9: Summary of Quality Appraisal views studies[1]

Author, date, title	SUMMARY OF THE STUDY AND AUTHORS' REPORTS OF FINDINGS	WEIGHT OF EVIDENCE						USE FUL NESS	RELIA BILITY
		SAMPLING PROCE-DURES	RIGOUR OF DATA COLLECTED	RIGOUR OF DATA ANALYSIS	GROUNDING OF FINDINGS IN THE DATA	BREADTH/ DEPTH OF STUDY FINDINGS	ACCOUNT OF PARTICIPAN TSPERSPECTI VES		
Share, M. (2011). *Developing early years professionalis m. The evaluation of the Early Learning Initiative's professional development programme for community childcare settings in the Dublin Docklands.*	ELI is a community-based educational initiative aimed at addressing educational disadvantage through the provision of an integrated programme for children, their parents and families, and educators from early years up to third level. This report examines the implementation of one element of the Early Learning Initiative - Parental Involvement in Children's Learning (PICL) training in community childcare centres in the Docklands.	A fairly thorough attempt was made to increase rigour in sampling: Sampling procedures were implemented within a participatory research design.	A fairly thorough attempt was made to increase rigour in the data collected: Researchers used a number of data collection methods.	A fairly thorough attempt was made to increase rigour in the analysis of the data: Data analysis consisted of a very systematic and justified	The findings of the study are well grounded/support ed by the data: Extensive reporting of data extracted by interviews with participants.	Good/fair breadth and depth: Multiple point of views are explored and their analysis provide a rich insight on strength and weakness of the programme	The study privilege the perspectives and experiences of ECEC professionals to a great extent: Central to the participatory methodology was a Research Reference Group that comprised representatives from the five	High	High

[1] The summary of the quality appraisal of impact studies can be found in table 4.2 on p.60.

				process.			childcare centres.		
Richter, K. (2012). Teaching competence of preschool teachers in the field of natural science. A quantitative and qualitative study of competence development in the context of an advanced training programme. (Translation from German)	This study evaluates a training programme which trains preschool teachers to encourage and support children's experimentations and explorations in the field of natural science. As a result of the training, professionals had better self-reported outcomes on interest in the topic, self-concept and expertise and methodical skills and revealed higher frequency of conducting experiments with children and encouraging children's' experiments. The effects also persisted 6 months after the training intervention (high dropout). Results confirmed that competence dispositions (interest, self-concept, expertise and methodical skills) are correlated.	A thorough attempt was made to increase rigour in the sampling: The sample is reasonably diverse.	A thorough attempt was made to increase rigour in the data collected: An interview topic guide was used, pilot interview was conducted, and literal transcripts of interviews were collected.	Several steps were taken to increase rigour in the analysis of the data: The analysis method is explained, and codes are well documented The author supports the analysis with extensive data extracts which are comprehensive and which support interpretati	The findings of the study are well grounded/support ed by the data:	Good/fair breadth and depth: Findings are adequate and useful. The underlying theoretical construct of competence dispositions and development is explored in good depth and breadth in the interviews. Results address the complexity of the topic. However, the relevance of gender might also have been addressed and explored in	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Semi-structured interviews with open-ended questions intended to capture subjective opinions and experience of respondents. The a priori deductive coding framework is altered to include categories and themes brought forward by participants.	High	High

				on. There is however no clear intention to look also for negative cases.		the study.	Feedback or discussion of results with respondents is not mentioned.		
Blatchford, P. Et al. (2001/2002). Relationships between Class Size and Teaching: A Multimethod Analysis of English Infant Schools.. *American Educational Research Journal*. 39(1): 101-132. (Linked study)	The study investigated the connections between class size and teaching interactions using a multi-method approach and data from a longitudinal study of more than 10,000 children and their teachers over 3 years. Results show, overall, that in smaller classes, there is more individualized teacher support for learning. The findings of the qualitative part rely on case study observations and semi-structured interviews with teachers and head-teachers.	Several steps were taken to increase rigour in the sampling: The schools in the study drew from a wide range of social backgrounds and were situated in urban, suburban, and rural areas.	A fairly thorough attempt was made to increase rigour in the data collected: There were multiple visits, during 3 years. The researchers spent enough time at the sites with the participants Data collection was comprehensive and enables a	Several steps were taken to increase the rigour in the analysis of the data: Field workers were trained to do observation. Findings were discussed Analysis of observations was carried out by different	The findings of the study are well grounded/supported by the data: A large amount of empirical data is presented. The observations from the case studies allow diversity of perspectives to emerge and portrait a rich description of experiences in both large and small classes.	Good/fair breadth and depth: The qualitative observations presented in the article present a thick description of the situation of small-size and large-size classes and their analysis is well elaborated.	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The study provides a meaningful combination of quantitative and qualitative data, in both 'parts' experiences of practitioners are at the forefront.	High	High

			rich description of experiences. 4 data collection methods are used	people					
Cardoso, M. G. (2012) Creating contexts for quality in childcare: playfulness and learning. (Translation from Portuguese).	This study aims to construct educational contexts that encourage the exploration and development of significant children's learning. It is a case study that uses training in context and action research. Key outcomes in terms of quality were: an evolution in the view of children as spectators into participating children abandoning an academic pedagogy. This implied changing practices, the educational environment (space and time), the planning and assessment practices, based in listening to the child, a reconceptualisation of the role of play in early learning from something children	Several steps were taken to increase rigour in the sampling: Apart from the parents, which sampling strategy is not stated, the other participants sampling is well justified and included the whole professional pedagogic team.	A thorough attempt was made to increase rigour in the data collected: The researchers spent several years in the institution and collected data from many sources in a comprehensive way. Several steps were taken to	Several steps were taken to increase rigour in the analysis of the data: The analysis method is explained although not in a very detailed way. The analysis presents clearly some of the	The findings of the study are well grounded/supported by the data: The narratives of the changing process are constantly illustrated by extracts of data from different sources.	Good/fair breadth and depth: The results address the complexity of the processes and illustrate with great depth the issues arising from different sources of data and perspectives. Perspectives are fully explored and linked with a range of individual and contextual	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Although the study focuses more on the professionals' views and practices, it includes also a range of perspectives from parents and children. A balance between the a priory themes	High	High

	naturally do (without the involvement of the adults) towards something that gives children the possibility to intervene directly in the every-day pedagogy and augmenting possibilities to invent and finding out about the world. There was a progressive coherence between discourses and practices.		increase the participant confidence in the interviews.	contradictions found in the process of change between the staff, the directive board, and the researcher.		variables.	for analysis and the emergent themes is achieved.		
Craveiro, M. C. (2007). Training in context: a case study in early childhood pedagogy. (Translation from Portuguese)	This study tried to clarify the professional development process of a group of preschool teachers, who were in an organizational development work context. The goal is to promote quality education for children. The study showed the importance of the contribution of diversified but congruent approaches and perspectives related to childhood pedagogy.	Several steps were taken to increase the rigour in the sampling: The criteria to select the participants for the interviews are unclear and dubious. It is possible that the applied manner can	Several steps were taken to increase the rigour in the data collected: The contexts of the interviews where carefully selected as to provide a calm environment	A thorough attempt was made to increase the rigour in the analysis of the data. The study combines several types of data collection and uses triangulation for the	The findings of the study are well grounded/supported by the data: The study is grounded in several sources of data, which is well presented and the different sources are clearly identifiable.	Good/fair breadth and depth: A range of issues is covered. The perspectives of participants are fully explored in terms of breadth. Moreover, the author clearly	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The analysis was both informed by a priori categories and emerging ones. The researcher also gave the	High	High

		lead to a selection of participants that will testify in a more congruent way with the researcher	but also a familiar one.	analysis. An external researcher coded the transcripts of the interviews.		unveils the complexity of the process of change in quality. The features of the interventions that supported this change are also clearly addressed.	teachers some opportunities to share their own knowledge, which gave them the role of expert.		
	The results also show changes in the team climate: it became more open to share and to collaborate with and to support each other: more team work between teachers and auxiliary staff and changes in teamwork between teachers. Besides that, teachers started to work with written plans based on child observations and they start to collect evidence of children learning by observing their own classroom.								
Jopling, M. Et al. (2013). The Challenges of Evaluation: Assessing Early Talk's Impact on Speech Language and Communication Practice in Children's Centres. *International Journal of Early Years*	This paper describes the findings of a qualitative evaluation of an early years' intervention, I Can's Early Talk (ET) programme. ET was designed to improve speech, language and communication outcomes for children aged 0-5 by focusing on enhancing practitioners' knowledge and skills.	Several steps were taken to increase rigour in sampling: Long negotiations with LAs. In the end, researchers used their team's network to	A fairly thorough attempt was made to increase rigour in the data collected: Researchers used a number of data collection	Several steps were taken to increase rigour in the analysis of the data: Researchers used methods to follow-up and they	The findings of the study are fairly well grounded/supported by the data: The authors describe different types of evidence: interviews, PCI observations and rating scales.	Good/fair breadth and depth: The study answered the research questions and provided information on how the intervention affected centre's	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Views of ECEC professionals were gathered	High	High

Education. 21(1): 70-84.	The research focused on children aged 3-4 years and was conducted in 14 Sure Start Children's Centres across England; Findings revealed improvements in practitioners' confidence and practice as a result of participating in the programme. The results also suggest that participating practitioners felt their capacity to understand and reflect on how to support children's speech, language and communication improved, particularly in the children's centres which had been accredited for over six months.	find centres. As a result, 14 centres composed a sample and were at different stage of implementing ET programme (which allowed to compare the effects of more experiences centres with 'new comers'.)	methods to diversify data sources. Views of different stakeholders were collected. The research team was trained in the use of the observation schedule and rating scales. A high degree of inter-researcher reliability was achieved.	adopted to changing circumstances. During the data analysis, an analysis day was held for the whole research team testing out and triangulating themes and gauging whether the team' experiences were consistent with the preliminary findings.	However, the paper does not present the data collected during PCI observation and rating - only findings are presented.	practices, practitioners skills and knowledge and their interaction with children	via different data collection methods; their consent was obtained to be filmed; online project database was created where the wider reference group could comment and offer feedback during the research process.		
Sheridan, S. Et al. (2013). Systematic quality-work in preschool .	This article is based on a collaborative study in Iceland, Sweden and Norway of the youngest children in institutional settings, such as	Several steps were taken to increase rigour in	Several steps were taken to increase rigour in the	Several steps were taken to increase rigour in	The findings of the study are well grounded/supported by the data:	Good/fair breadth and depth	The study privileges the perspectives and experiences of	High	High

		sampling:	data collected:	the analysis of the data:			ECEC professionals to a great extent:		
International Journal of Early Childhood. 45(1): 123-150.	preschools. The study is based on the voices of preschool staff who work with very young children. The results showed the dilemmas and challenges that these teachers experience in their everyday work.	The regions, preschools, and teachers selected for the study have been stratified to represent, as closely as possible, Swedish preschool teachers.	The authors were careful to follow the interview guide so that the interview situations were as similar as possible for all of the participating teachers. During the interviews, follow-up questions were asked if the answers were unclear.	The authors analysed the data independently from one another and made the first categorization of themes.	The meaning preschool teachers ascribe to systematic quality work is presented under 3 themes. These three themes are well supported by quotations of the interviews. The quotations are used not only to enrich and give a concrete form to the result, but also to show that the result is grounded in the participants' statements.		The article builds extensively on practitioners' perspectives and understandings.		
Peixoto, A. (2007) The physical sciences and laboratory	This study evaluates the impact of an in-service teacher education programme aiming at deepening teachers' physical science knowledge as well as their	A thorough attempt was made to increase rigour in the	Several steps were taken to increase rigour in the data	Several steps were taken to increase rigour in the	The findings of the study are fairly well grounded/support ed by the data:	Good/fair breadth and depth.	The study privileges the perspectives and experiences of ECEC	High	High

| activities in preschool education: diagnosis and evaluation of the impact of a training program for early childhood educators.

(Translation from Portuguese) | competences for using the lab to teach physical sciences.

The programme led the participants to implement diverse types of lab activities, with different levels of openness, being most of the activities organized in such a way as to foster children' conceptual and procedural knowledge development.

The facilitating role of the teacher educator appeared a crucial factor for the change of teachers' practices.

Participants' conceptions about lab activities and their use in science teaching developed: they got closer to the conceptions accepted by the specialists in this area. | sampling:

All teachers from the region were surveyed. In the 2nd study everyone who wanted to participate in the training was invited to take part. The training capacity was 16 teachers. Because more than 20 people volunteered; they applied clear selection criteria. | collected:

Several methods for data collection were used. Evaluation was done before the training.

Researchers used observations and the teachers used self-evaluation forms to see how the training was applied in practice.

Data was thoroughly | analysis of the data:

The survey results were quantified and clustered. Interview results were documented and validated with experts. | The findings are supported by presentation of raw data and survey analysis. | | professionals to a great extent:

The consent and feedback of teachers was constantly taken into account. | | |

				validated.					
Wood, E. Bennett, N. (2000). Changing theories, changing practice: exploring early childhood teachers' professional learning. *Teaching and Teacher Education.* 16(5–6): 635-647.	This article gives insights into how teachers change their theories and practice. The data are drawn from a research study carried out in England which examined nine early childhood teachers' theories of play and their relationship to practice. As an unintended outcome of their close involvement in the data collection and analysis, all of the teachers changed their theories, or practice, or both. The contexts which stimulated these changes and the learning processes which the teachers experienced are described and analysed. The conclusions indicate a need for a theoretical underpinning for teachers' professional development which might also inform the design of teacher education courses.	Several steps were taken to increase rigour in sampling: A broad range of teacher characteristics was sought	Several steps were taken to increase rigour in the data collected: Information on the teachers' classroom practices was acquired through a systematic cycle of data collection. Each teacher's observations and analyses were recorded and transcribed for analysis.	Several steps were taken to increase rigour in the analysis of the data: The interviews were transcribed and subsequently analyzed independently by two researchers. The resulting interpretation was discussed and verified with the teachers at the second group meeting.	The findings of the study are fairly well grounded/support ed by the data: Two detailed case studies plus quotations from other study participants to support and extend arguments.	Good/fair depth but very little breadth.	The study privileges the perspectives and experiences of ECEC professionals to a great extent.	High	High

Vonta, T. Et al. (2007). Mentoring in the professional development of a teacher and a preschool teacher. (Translation from Slovenian)	This study focuses on the principles of life-long learning as a continuous process, which is supported by the knowledge and skills of using ICT. The goal was to improve the quality of preschool education by qualifying mentors and mentoring teams that support and evaluate preschool teachers' work. The results show the importance of a professional portfolio as a tool for sustaining professional development. The role of the professional mentors is to encourage, observe and provide feedback as well as to advise about possible changes considering the professional work with children.	Steps to increase rigour in sampling were not stated.	A thorough attempt was made to increase rigour in the data collected: Data collection was comprehensive, flexible and sensitive enough to provide a complete and rich description of people's perspectives and experiences. Several questionnaires were used.	A thorough attempt was made to increase rigour in the analysis of the data: Data analysis methods were systematic. Diversity in perspectives was explored.	The findings are well grounded/supported by the data: The data was appropriately analysed and the interpretation directly follows the data (shares of answers to certain questions, the analysis of answers to open-ended questions…).	Good/ fair breadth and depth: A range of issues are covered. Critical reflexion and the evaluation of preschool teachers was considered. The differences in opinions between preschool and elementary school teachers were analysed.	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The participants were included in all the steps of the study, their critical evaluation was considered and their needs were identified. The topics of the program were simultaneously adapted during the whole educational process.	High	Medium
Sandstrom, H. (2012). The characteristics	This study examined 25 four-year-old pre-school classrooms with high	A fairly thorough attempt was	A fairly thorough attempt was	Steps to increase rigour in	The findings of the study are well grounded/support	Good/fair breadth and	The study privileges the perspectives	High	Medium

and quality of pre-school education in Spain. *International Journal of Early Years Education.* 20(2): 130-158	children to teacher ratio from a random sample of 15 schools within a large urban city in southern Spain. The results highlight the importance of a pre-school education for children's development and school readiness, but also emphasise the challenges teachers faced with the new government-subsidised, universal pre-school programme, including increased class sizes and a lack of staff and resources.	made to increase rigour in sampling: Sampling frame and selection strategies are accurately described.	made to increase rigour in the data collected: They used a stratified random sampling of settings in one geographic area.	the analysis of the data were not stated.	ed by the data: Detailed quotations given that fit purpose. Teachers' rich descriptions provide supporting qualitative evidence that gives explanation to the quantitative findings.	depth: 11 themes are identified to support and explain the findings.	and experiences of ECEC professionals to a certain extent: The study is a combination of observed measures of settings and views of ECE professionals		
Ang, L. (2012). Leading and Managing in the Early Years: A Study of the Impact of a NCSL Programme on Children's Centre Leaders' Perceptions of	This study explored children's centre leaders' perceptions of leadership and the impact of their professional qualification - the National Professional Qualification in Integrated Centre Leadership (NPQICL) - on their professional practice. The study indicates that	A fairly thorough attempt was made to increase rigour in sampling: They used a stratified sample based on two	Minimal/few steps were taken to increase rigour of data collection: The ethical approval was formally	Steps to increase rigour in the analysis of the data were not stated in the article.	The findings of the study are well grounded/supported by the data: The findings presented in the article provided pertinent examples of the perceptions held by children's	Good/fair breadth and depth: Richness and complexity arising from the data has been portrayed and related to existing	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The analysis carried out in	High	Medium

Leadership and Practice. *Educational Management Administration and Leadership*. 40: 289-304.	leadership development programmes such as those embodied in the NPQICL, can have a strong impact on children's centre leaders, their practice and perceptions of leadership (empowering their professional role, reflective leadership style).	main categories (cohort of participants and geographically spread)	sought from the research ethics committee of the researcher's institution.		centre leaders towards their leadership and practice.	research.	the findings and discussion sections builds extensively on practitioners' perspectives.		
Picchio, et al.(2012). Documentation and analysis of children's experience: an ongoing collegial activity for early childhood professionals. *Early Years*. 32(2): 159-170.	Systematic documentation and analysis of educational practice can be a powerful tool for continuous support to the professionalism of early childhood education practitioners. This paper discusses data from a three-year action-research initiative carried out by a research agency in collaboration with a network of Italian municipal nido services. The action research aimed at elaborating and implementing documentation procedures that nido practitioners could accomplish continuously and that could form the basis of a collegial reflection on	Steps to increase rigour in sampling were not clearly stated. A cascading procedure, which was inscribed within a framework of in-service training, provided the involvement of all the Pistoia nido practitioners in the action	Several steps were taken to increase rigour in the data collected: They used the method of Documentation as tool for data collection. The research group met periodically	Several steps were taken to increase rigour in analysis of the data: The research group was constantly acknowledging difficulties and provided feedback to teachers.	The findings of the study are well grounded/supported by the data: The data presented fit the interpretations; quotes are dated and identified by alphabetical codes	Good/fair breadth and depth: Findings are discussed in the light of the theoretical frame outlined at the beginning of the paper. The paper grasps the experience and views of the practitioners, impact on	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The paper builds mostly on the view of those practitioners who participated in the development of the research framework and	High	Medium

	children's experience and the improvement of practices. The analysis of practitioners' discussions about weaknesses and strengths of the new procedures shows how they could be inscribed within the framework of their current professional engagement and support their processes of reflexivity.	research. However, it is not clear how practitioners were selected into research group.	to elaborate the documentation procedures, which were then proposed, tested and discussed by all the teachers during nido or inter-nido meetings.	The analytical process was carried out in close consultation with the practitioners involved in the study		educational action and practices and difficulties in practitioners' practices.	documentation framework. Those practitioners received constant feedback during the research process		
Johansson, I. Et al. (2007). Practitioner-oriented research as a tool for professional development. *European Early Childhood Education Research Journal*. 15: 151-166.	The aim of this study was to analyse how a model for practitioner-oriented research can be used as a tool for professional development in the preschool. The focus of interest is the type of knowledge that is formed when researchers and preschool staff cooperate on local projects. The participants consisted of fifteen working-teams from preschools in two Swedish cities, together with three university-based researchers.	Minimal few steps were taken to increase rigour in sampling: The population was quite diverse. Participation of teachers was based on voluntary	Several steps were taken to increase rigour of data collection: A combination of data collection tools was used. Focus	Several steps were taken to increase rigour in the analysis of the data: The transcripts of the interviews were thematically analysed in a systematic	The findings of the study are well grounded/supported by the data: Quotes are extensively presented to illustrate the findings. However, the quotes are not numbered or specified - so it is not clear whether	Good/fair breadth but little depth: The findings are widely described in terms of impact of practitioner-oriented research on ECEC professional's competences development and	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The practitioners participated in elaboration and implementation of the research and they were	High	Medium

		basis.	groups were tape recorded and held in a place where participants would feel at ease.	way.	they come from one or from different persons.	improvement. However, there is no discussion on the thematic differences of the working group and whether it had any influence.	asked about their perceptions and experiences via open-ended questionnaires (one before and one after the research) and via focus group interviews.		
	The results showed that the staff generally had a positive picture of the relevance of research-based knowledge for their developmental work, and increased their ability to use the group for constructive critical reflection on their professional work in preschool.								
Leal, R. A. (2011) Educating the citizen from kindergarten: the contribution of early childhood educators' assessment practices in collaboration with the family. (Translation from	This research seeks to understand the complex and dynamic phenomenon of the learning assessment of children in collaboration with the family in Preschool Education (PE) as a mean of improving the development of children's competences. The evaluation reveals an impact on the learning assessment practices at a micro level (decisions made in the activities room) and, to a lesser extent, at a meso level (decisions made within the institution).	Minimal steps were taken to increase rigour in the sampling: The author selected only 1 private kindergarten with which she already worked before. Parents and teachers were selected based on	A thorough attempt was made to increase rigour in the data collected: The data collection was comprehens ive. In 4 stages, different methods were used with the constant reflection	Minimal steps were taken to increase rigour in the analysis of the data: The authors used triangulati on. There is an extensive explanatio n on how the results were	The findings are fairly well grounded/support ed by the data: All the supporting statements, opinions and analysis of the responses is presented in detail.	Good/ fair breadth and depth: The perceptions of the participants are well explored.	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The participants were involved in the research and the data collection was confidential.	High	Medium

		voluntary basis.	from the participants and experts	interpreted after each data collection phase. However, it is not clear how the synthesis was done.					
Portuguese)	The early childhood educators integrated into their practices a number of assessment strategies, which created an awareness of the importance of focussing on the child's activity and on the competence-development of each child. However, no steps were taken to change practices, and the children's parents continued to be passive subjects.								
Peeters, J. Vandenbroeck, M. (2011). Childcare practitioners and the process of professionaliz ation. In: Miller Cable *Professionaliz ation and Management in the Early Years.* London: Sage, pages 62-74.	There is large degree of consensus that higher staff qualifications are correlated with higher quality in early childhood provision and that reflection is the most important part of professionalism. However, the concepts of the 'reflective practitioner' and the 'reflexive practitioner', although frequently mentioned in the literature, remain rather underdeveloped and the apparent consensus on the need for reflection may very well disguise a lack of consensus on what it actually	Steps to increase rigour in sampling were not stated.	Several steps were taken to increase rigour in the data collected: The researchers used multiple sources for data collection.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are fairly well grounded/support ed by the data: Participants' interview excerpts are extensively reported and multiple perspectives - including dissonant meanings - are explored. Quotes are	Good/fair breadth and depth: Participants' perspectives were explored and gave account of complexity and multiple points of view. Through the analysis of practitioners' perspectives	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Interview excerpts are extensively reported and multiple perspectives - including dissonant meanings - are	High	Medium

	means.				identified with specification of professional role/date and this allows to identify whether quotes are taken from the same person.	data were fairly elaborated for interpretation by referring to existing literature	explored.		
	In this article analysis of narratives of professionals during 30 years of action research show how professionals who engage with pedagogic guidance can become actors of change and develop new pedagogic practices.						The discussed themes arouse out of participatory action-research projects carried out collaboratively by researchers and practitioners		
Lino, D. (2005). From academic training to training in context: an innovative path to the reconstruction of early childhood pedagogy. (Translation from Portuguese)	This study aims to understand the impact of in-service teacher training in preschool teacher's professional development and in the quality of early childhood practices. The results highlight the relationship between quality practices in early childhood education and children's learning. Furthermore, the data show that pedagogy apprenticeship is a long running process which requires the learning of complex nature skills.	Several steps were taken to increase rigour in the sampling: The criteria for selection were applied and justified. However, there were difficulties in contacting students who changed their	Several steps were taken to increase rigour in the data collected: The interviews with the teachers were carefully planned with them. The data collection methods were	Minimal steps were taken to increase rigour in the analysis of the data: The interviews were turned back to the teachers for confirmation or for introducing some	The findings of the study are well grounded/supported by the data: Different types of data was presented to describe the quality of teacher's practice. Children's learning was also documented by descriptive records on the target-child observation record and	Good/Fair breadth, but little depth: The study is fairly well designed by using a variety of data at the same time, which is clearly focused on specific questions. Unfortunately, the study	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: The teachers' interviews were semi-structured which enabled them to express their own views in an open way.	High	Medium

	The study also highlights the interaction between pre-school teachers training, professional development and children's learning.	address. Moreover, there is no information about how and why they chose the teachers when the total number of each group was completed.	comprehensive enough to answer the research questions. However, 1 group received more support from and time with the researcher, which may cause a little bias in data collection.	changes in their own discourse.	evaluated in terms of child involvement. Data from interviews are clearly identified showing the scope and variety of the data used to support findings.	does not have data on the teaching quality and children's involvement before the specialised in-service course was delivered.	However, unequal opportunities have been given to the two groups to express their opinions, as the teachers familiarity and time with the researcher is considerably different between the two groups.		
Menmuir, J. Christie, D. (1999). Encouraging professional reflection in early education.. *International Journal of Early Years Education*. 7(1): 61-75.	This article examines the use of the Repertory Grid technique derived from personal construct theory as a tool to aid the reflection of teachers and other professional working in Early Education. The main focus of the article is a study of the constructs used to describe children, elicited at the start and again at the end of a module	Minimal/few steps were taken to increase rigour in sampling: Participants are coming from different settings and apparently with	Minimal/few steps were taken to increase rigour in the data collected: Researchers used different methods for data	Several steps were taken to increase rigour in the analysis of the data: The analysis is well described and the	The findings of the study are fairly well grounded/supported by the data: Only a case study of one participant is presented to demonstrate the development/changes in practitioners' thinking. For the	Good/fair breadth and depth: The article provides a profound description of the construct in practitioners' thinking that emerged during the	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: The researchers provided guidance on	Medium	Medium

	'Children's Development and Learning', which formed part of a continuing professional development postgraduate award in Early Education. The approach was evaluated by quantitative and qualitative analysis of the participants' grids using the Rep Grid 2 package and by evaluation of the end of module interviews.	different length of experience; however, no information is provided on how they were recruited and what their socio-demographic characteristic are.	collection. However, in the research process only 7 participants (out of 13) managed to finish the module till the end	example from one participants' thinking development is presented as a case study. The overall methodology of filling-in the grid is presented in the Appendix.	rest the table with variance is given. The findings on the usefulness of the exercise and changes in the views is supported by interviews (with are marked based on the numbers of the participants).	exercise and the usefulness of the exercise. It acknowledges the limitations made. To avoid being too superficial, the study provides in depth analysis of the intervention's process undergone by one of the participants.	how to fill-in the grid, and one informal discussion was held afterwards to assess their experience. However, there is no information on how they were assisted in the beginning of the process and whether they were involved into the design of the research process.		
McMillan, G. Et al. (2012). Changing Mindsets: The Benefits of Implementing a Professional Development Model in Early Childhood Settings in Ireland.	This paper examines the effectiveness of a professional development model (PDM) devised as part of a research project carried out to support early childhood professionals in Ireland in enhancing their pedagogy. The PDM was constructed on	Steps to increase rigour in sampling were not stated.	Several steps were taken to increase rigour in the data collected: Multiple sources of data were	Minimal/few steps were taken to increase rigour in the analysis of the data: The methods	The findings of the study are well grounded/supported by the data: The findings rely heavily on the reporting of practitioners' excerpts from interviews and	Good/Fair breadth, but little depth:	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: The discussion	Medium	Medium

Professional Development in Education. 38(3): 395-410.	a socio-cultural theoretical framework whereby Vygotsky's zone of proximal development was applied. Overall the findings suggest that implementation of the PDM had benefits at personal and professional development levels and also at early years setting level. However, benefits to the early years professional community were limited and the paper makes recommendations regarding the potential role of the PDM in the construction of a strong early years professional community of practice in Ireland.		collected in order to triangulate findings on the impact of the CPD model proposed on practitioners' perceptions and practices as well as on children's learning experiences.	used are appropriate to analyse the empirical materials collected.	reflective diaries.		of findings draws extensively on empirical materials that make explicit references to practitioners' views and perceptions. However practitioners have not been involved in the process of data analysis (feeding in the process of data interpretation).		
Rönnerman, K. (2008). Conscious quality work. Follow up of course Q in preschool and the implications for preschool teachers in their daily practice.	The purpose of this study was to investigate and follow up the possible implications for practice of pre-school practitioner's participation in an action research course. The aim was to search for critical elements that may be crucial for courses such as this one when it comes to impact on development and thus on the quality of the preschools. The study highlights how preschool	Several steps were taken to increase rigour in the sampling: The web based questionnaires were sent in the beginning of	Several steps were taken to increase rigour in the data collected: The respondents were reminded	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are limited grounded/supported by the data: Although it is not clearly stated and although the quotes are not numbered, the quotes presented	Good/fair breadth and depth	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Pre-school teachers had	Medium	Medium

(Translation from Swedish)	teacher's perceptions of their own profession changed and how they felt they had changed their ways of working with children. The professional growth of pre-school teachers participating in the project led to better quality of teaching.	the course. Sampling strategy was appropriate to the questions posed.	twice to fill in the questionnaire.		seem to support the findings.		wide possibilities to express their opinions on the subject and to discuss them during the practical phase of the project		
Blenkin, G. Hutchin, V. (1998). Action research, child observations and professional development: some evidence from a research project..	This article outlines some findings from the early childhood education (action) research project, *Principles into Practice (PIP): Improving the Quality of Children's Early.* The article highlights a number of ways in which the case study evidence of trained and untrained early years staff is revealing a crucial interdependence. The interdependence is between the action research process itself, the nature and quality of child observations, and the successful professional development of individual practitioners.	Steps to increase rigour in sampling were not stated in the article.	Several steps were taken to increase rigour in the data collected: Each 'action researcher' was supported at the beginning by a member of the project	Minimal few steps were taken to increase rigour in the analysis of the data: The case studies show how child observations have been used to illuminate different aspects of practice and how	The findings of the study are fairly well grounded/supported by the data: The study presents accurate description of how action plans developed and were implemented, building	Good/fair depth but little breadth.	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Case studies of practitioners are extensively presented	Medium	Medium

	The article concludes with evidence from the PiP project which shows that these interdependent processes can only take place when change and development is supported from within the institution and/or from outside.		team. Evidence such as observations in writing or on tape were recorded as well as field notes and reflections on meetings and discussions.	this affected practitioners' professional development.	extensively on data collected by practitioners and analysed together with the research associates.				
Hayes, N. Et al. (2013). Evaluation of the Early Years Programme: Child Development Initiative (Ireland). Dublin: CDI.	CDI is one of three sites that constitute the Prevention and Early Intervention Programme (PEIP) that was set up with the objective of testing innovative ways of delivering services and early interventions for children and young people, including the wider family and community settings. The study combines a quantitative outcome evaluation with a qualitative process evaluation of the programme. In the qualitative part practitioner's	Steps to increase rigour in sampling were not clearly stated: Despite the fact that very rigorous procedures were adopted for the quantitative part, it is not clear how	Several steps were taken to increase rigour of data collection: Data were collected from a triangulation of methodologies including Early Years practitioner	Steps to increase rigour in the analysis of the data were not stated in the article: Only thematic analysis is mentioned.	The grounding of the data is quite limited: Only a few quotes are reported from focus groups, the findings section is mainly descriptive.	Good/fair breadth but little depth: Process research questions are outlined according to the categories of utilisation, fidelity and organisation. Information is presented in response to these questions that	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: Early years staff took part in focus groups, but it is not clear how many and also, the main focus of study	Medium	Medium

	perspectives on structural and organisational components of the programme were analysed.	early years staff were selected for focus groups.	focus groups and independent observation of service practice.				highlights key positive and negative aspects of the process of programme implementation.	was on children and parents.		
Asplund Carlsson, M. Et al. (2008). From doing to learning and understanding. A study of teacher's learning in the field of aesthetics.	The aim of this study was to analyse teachers' changing ways of talking about children's aesthetic learning in the early years as a result of a research and development project. The teachers expressed a view of having become more aware of the concept of learning objects in the aesthetics, of their own role as teachers in directing children's attention and to listen to children. The teachers thus gained a new way of talking about themselves as teachers and about children's learning within music, dance and poetry.	Several steps were taken to increase rigour in the sampling: The sampling strategy was appropriate to the questions posed.	Steps to increase rigour in the data collected were not stated.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are fairly well grounded/supported by the data: Although the quotes are not numbered, it is clear that they support the findings.	Good/ fair breadth and depth	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The questions were open ended and follow up questions conducted in a dialogical way.	Medium	Medium

Aubrey, C. Et al. (2012). Enhancing Thinking Skills in Early Childhood. *International Journal of Early Years Education*. 20(4): 332-348.	This study carried out an evaluation of two thinking-skills programmes (Let's Think! and Key to Learning). The article describes what typically happened when such programmes were delivered in the context of the real world of national and local policy influences and in schools and classrooms when programmes are purchased, staff are trained and whole-school accommodation has to take place. All settings reported changes in teachers' practices and an impact on the whole school.	Minimal few steps were taken to increase rigour in the sampling.	Steps to increase rigour in the data collected were not stated.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are fairly well grounded/supported by the data: A summary of fieldwork observations is presented in the findings sections.	Good/fair depth but very little breadth.	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: A balance between open-ended and close-ended responses to interviews was reported. Participants were not involved in designing the research.	Medium	Low
Bleach, J. (2013). Using action research to support quality early years practice. *European Early*	This article examines the effectiveness of action research as a continuous professional development (CPD) tool. Learning communities, reflective practice and professional dialogue were key elements.	Steps to increase rigour in sampling were not stated.	Several steps were taken to increase rigour of data collected:	Steps to increase rigour in the analysis of the data were not stated.	The grounding of the data is quite limited:	Good/fair breadth but little depth:	The study privileges the perspectives and experiences of ECEC professionals to a certain extent.	Medium	Low

Childhood Education Research Journal. 21(3): 370-379.	Participants found the programme easy to understand and useful to their practice. The combination of purposeful peer interaction and learning through action helped improve the quality of teaching and learning in the settings.

Action research supported the implementation of change by helping participants to develop the skills needed, both individually and collectively, to deliver outcomes they really cared about. | | Site visits were frequently carried out and characterised by a continuous 'follow-up'.

Different methods for data collection were used | | Summary figures for responses

and illustrative quotes are noted, but only very little data is presented.

There are numerous descriptions of changes, but they are not very well supported by empirical data. | The perspectives of few practitioners are presented in support to key findings. The findings however mainly rely on descriptions of changes and effects at different levels. Findings are scarcely elaborated. A range of issues are covered, but with little depth. | All respondents were practitioners who took part in the action-research process, but only a few quotations are reported in order to support the findings/conclusions. | | |
| Potter, C. Hodgson, S. (2007). Nursery nurses reflect: Sure Start training to enhance adult child interaction.. *Reflective Practice*. 8(4): 497-509. | This paper describes a reflective training approach designed to enhance interactions between adults and children in two early years settings.

Within the context of a local Sure Start programme, a 12-week course to five nursery nurses was delivered, which | Steps to increase rigour in sampling were not stated. | Minimal steps were taken to increase rigour of the data collected:

More than one method of data | Steps to increase rigour in the analysis of the data were not stated. | The findings of the study are fairly well grounded/supported by the data:

Use of quotes to support findings. | Good/fair depth but very little breadth:

Only five respondents from two early years settings were involved in | The study privileges the perspectives and experiences of ECEC professionals to a great extent:

Practitioners | Medium | Low |

	provided extensive opportunities for reflection in and on action through the use of both video clips and work-based support sessions. The training succeeded in facilitating both increasing reflection in this key area of early years activity, which in turn resulted in some major changes in practice.		collection was used.				the study.	are sole source of data.		
Rönnerman, K. (2003). Action research: educational tools and the improvement of practice. *Educational Action Research*. 11(1): 9-21.	In this article an in-service training project is presented and discussed. The project was, over a period of two-and-a-half years, carried out with pre-school work teams in an area of Goteborg. Results show that the educational tools were important for practitioners if they were to continue improvement at school. A key issue for the teachers seems to be how the educational tools and the actions are related to	Steps to increase rigour in sampling were not stated.	Minimal/few steps were taken to increase rigour of the data collected: Data from 3 sources included: interviews, diaries, survey.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are fairly well grounded/supported by the data: Quotations are used to support points made from more than one person, quotations illustrate points well.	Good/fair depth but very little breadth: Findings from only a few preschools	The study privileges the perspectives and experiences of ECEC professionals to a great extent: Practitioners are sole source of data.	Medium	Low

	everyday practice.								
Oliveira-Formosinho, J., Araújo, S. (2011). Early education for diversity: starting from birth. *European Early Childhood Education Research Journal*. 19(2): 223-235.	This article analyses the topic of early diversity education, considering intervention and research that has been developed by the Childhood Association. The authors aim to identify the main characteristics of this pedagogical approach that are most effective.

The interventions were carried out within a cooperative praxiological research approach.

The presented case study aimed at researching programme development and outcomes.

The results highlight the important role of context-based teacher education processes and, within these, the central role of pedagogical dimensions of families, nature and culture | Steps to increase rigour in sampling were not stated. | Steps to increase rigour in the data collected were not stated. | Several steps were taken to increase rigour in the analysis of the data:

The content analysis was conducted through the Kvale system that allows the use of formally established categories and proceeds to a process of condensation. | The grounding of the data is quite limited:

Illustrative quotes are not used. | Good/fair depth but very little breadth:

There is only data presented from portfolios and interviews with six practitioners.

It is not mentioned how many settings are represented.

The article does not give sufficient information about problems with the method. | The study privileges the perspectives and experiences of ECEC professionals to a great extent:

Practitioners are the only data source for the study. | Medium | Low |

	as mediators in the emergence of sensitivity and respect for all forms of difference.								
Vujičić, L. (2008). Research and Improvement of One's own Practice – Way to Development of Teachers'/preschool teachers' Practical Competence.. In: Irē na Žogla; *Teacher of the 21st century: Quality Education for Quality Teaching*. Riga: University of Latvia Press, pages 184-194.	This paper reports the results of a study performed in the first year of a three year research project '*Changing the culture of educational institutions*'. The work was carried out with emphases on preschool teachers' training for the process of research and improvement of their own practice by creating a stimulating environment of an educational institution which is attended by children ranging from one to six/seven years of age.	Steps to increase rigour in sampling were not stated.	Several steps were taken to increase rigour of the data collected: They used multiple tools for data collection.	Steps to increase rigour in the analysis of the data were not stated: Analysis is only mentioned in relation to shared analysis and discussion	The findings of the study are fairly well grounded/supported by the data: Detailed account of each of the six meetings, with quotations.	Good/fair depth but very little breadth:	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The article builds extensively on practitioners' perspectives and understandings.	Medium	Low
SQW (2012). *Evaluation of the 3,4,5 Learning Years Services youngballymu*	The 3,4,5 Lewarning Years Service aims to improve holistic developmental and learning outcomes for children in early childhood care and education (ECCE)	Steps to increase rigour in sampling were not	Steps to increase rigour in the data collected were not	Steps to increase rigour in the analysis of the data	The grounding of the data is quite limited:	Good/fair breadth but very little depth:	The study privileges the perspectives and experiences of ECEC	Medium	Low

n (Ireland). Dublin: youngballymun.	settings in Ballymun by increasing the quality of service provision through staff professional development and the provision of mentoring and coaching support to enhance practice. The impact has been particularly evident in terms of staff development, marked changes in practice and in terms of perceived benefits for children.	stated. It is only stated that all 8 preschool settings that have engaged with the Service agreed to participate.	stated.	were not stated. .	There is not much 'data' presented. The whole report is more descriptive: not many quotations, nor field notes of the observations etc.	It is not easy to state to what extent the data has been transformed/a nalysed. However the report covers a broad description of the changes, difficulties and challenges that the implementatio n brought about.	professionals to a certain extent: The research approach focused on understanding perceptions about the extent to which learning outcomes for children are improving as a result of engagement in HighScope and Síolta.		
Van Keulen, A. (2010). The Early Childhood Educator in a Critical Learning Community: Towards Sustainable Change. *Contemporary Issues in Early*	The action research project Sustainable Change in a Critical Learning Community was conducted in the Netherlands to improve quality in early childhood by enhancement of critical reflection at all levels in early childhood organisations. This action research project	Steps to increase rigour in sampling were not stated.	Steps to increase rigour in the data collected were not stated.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are fairly well grounded/support ed by the data: Excerpts from participants' interviews and reflection diaries were quoted	Limited breadth or depth: A limited range of issues are covered and variations of meanings arising out of	The study privileges the perspectives and experiences of ECEC professionals to a great extent: The	Medium	Low

Childhood. 11(1): 106-112.	was conducted in cooperation with four childcare-providing organisations. The article aims to answer questions and worries in childcare organisations in the Netherlands and to fill a gap in the professionalization of individuals and teams.				extensively. References were made to the participant's first name of each quote; two quotes came from the same person.	practitioners' perspective are only partially explored in the discussion of findings.	professional learning methods used in the action training research were co-constructed and developed with participants whose views were extensively accounted for in the results section.		
Peeters, J. (1993). Quality improvement in childcare centres, with the support of the Bernard Van Leer Foundation.	This article explores the evolution of the pedagogical quality of childcare in Flanders between '79 and '93. Different action research projects were set up and accompanied by training, supervision and mentoring. The author states that through supplementary training and courses, change can be effected in the area of furnishing, play materials, stimulation of self-reliance	Steps to increase rigour in sampling were not stated.	Steps to increase rigour in the data collected were not stated.	Steps to increase rigour in the analysis of the data were not stated.	The findings of the study are not supported by the data: There is not much data presented. The article is very descriptive because it is a summary of 13 years of action research.	Good/ fair breadth but little depth: A broad range of issues are covered (10 aspects of quality + quality assurance). Also the article summarizes	The study privileges the perspectives and experiences of ECEC professionals to a certain extent: The different studies and projects all started with an inventory of the perspectives of	Medium: The article explores 13 years of action research by presenting different projects that have been effective in	Low: There is almost no information about the sampling, data collection, data analysis.

	and democratic functioning within the institution. To achieve a coherent pedagogical vision, the author states that an extensive period of guidance within the institution is required.				the effects of 13 years of action research, training, supervision and the construction of training materials.	professionals, next to the made observations. Unfortunately, the article doesn't provide a lot of quotes.	supporting the Flemish child care sector at the end of the '80.	