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Educational Studies in Mathematics

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Title word cross-reference

\((-8)^{1/3}\) [TE97]. \(-2 = (-8)^{1/3} = \left((-8)^2\right)^{1/6} = 2\) [GR97]. 2 [MP96].
2 \times 2 [Roo71]. 3\textsuperscript{rd} [Une74]. \(dy/dx\) [Thu72]. \(i\) [Sch11b]. \(\mathbb{R}^3\) [SP16]. \(\mathbb{Z}\)
[Rev76]. \(n\) [Bac71, Sch11b]. \(S_4\) [Hah75]. \(\Sigma\) [Gro77]. \(\varepsilon\) [Roh10]. \(x\) [Mos98].

[Roh10].

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1 [DWMB05b, EH05a]. 10th [RR05]. 10th-Grade [RR05].
11-to-13-year-old [Rou68]. 11-Year-Olds [FB02]. 12 [Rut05, WN04].
[Ano72b]. **1972** [Ano74c]. **1973** [Ano74d]. **1974** [Ano74b]. **1977** [Fre78b]. **19th** [Dam87]. **1er** [Cas69c, Cas69b].

2 [DWMB05a, EH05b, Pea76]. **2001** [Rut02]. **2003** [Ano04c]. **2005** [Ano06b]. **2008** [GM10]. **2015** [Ano16b, Ano16c]. 25 [Kae94]. **260** [Kae94].

3-space [MRCR11]. 346 [Uhl03]. 3D [PC10].

5-year-olds [Wri94]. 50.3 [Uhl03]. 5ème [Une73]. 5th [Une73, OK05, RRP91, Wal73b].

6 [Bal90, Egs70]. 6-year-olds [LH18, Wri94]. 6ème [Une73]. 6th [Une73, Wal73b, ZS07].

7-Year-Old [Eva07]. 7th [BCFF+98].

8-year [WC08]. 8th [AF05, RRP91].

978-0-521-76166-6 [Sfa15]. 978-1-107-68569-7 [Sfa15]. 978-1-139-04536-0 [Sfa15].

etre [TLM07].

abacus [Eng75, Eng76]. **Abbreviations** [Nar00]. Abduction [Mey10, PR11]. **Abilities** [Eng97, AKL80, Bis80, SM72, VP13]. Ability [Cla07, MC01, Rut87, AG83, BCLH89, Dek87, EJ13, FQL+17, HH78, Hod96, LC81, PC10, Tar09, VR90]. Aboriginal [Gra88]. above [HP03].

above-average [HP03]. **Absolute** [AI12, MH97, SBP11]. Abstract [Haz99, Arm96, Cob86, DL14, FC12, GE98, SW14, Tic12, WR96].

Abstraction [Haz99, HZ05, Kid08, MO06, ES96, GE98, MW00, Sch16]. Abstractions [Nar00]. **abused** [TTL+13]. Academic [CBS12, RC04, AAB03, Cas04, Cob87, Eve99, Hah14, RC02, SPFGF14, Wak14]. accelerate [MB16]. acceptance [FTM81]. Accepting [ODV06]. access [SJS12]. accessibility [SHAC01]. accommodation [KRHD15]. accompagnant [Rob95]. accompanying [Rob95, Sin03]. According [LH97, Tre87].

Accounting [Riv07]. Accounts [Llo06]. accumulation [YS12]. Accuracy [McD89, RSL17]. Achievement [CRL06, Rob90, Ade98, Beg71, Cas04, Che88, Cra12, CLSM17, Han89, IWF+15, Kae93, Kae94, KAJHB10, LC15, Lor82, Ma96, MK91, NCMO15, SJ17, SC17, Sou83, TA08, TF95, Tch11, Zep81]. achievements [Fre75]. achieving [Kar10, KB11]. Acknowledgements [Ano99a]. Acknowledgment [Fre78a]. **ACODESA** [HGM15]. acquired [Dag96].

Acquiring [Wea90]. **acquis** [Dag96]. Acquisition [TDGV09, CLR16, Une74, Hee85, KT01, MB16, SL74, Ver79]. acquisitions
CMdR18, CB89, CPPC18, CPPT$^+$13, ES96, GT00, Hah75, Hew12, HSZ17, LL99, MS97, MvdKM13, MS09, MP14, PK17, Rad00, RFP14, RDH09, SB97, SD94, Sl98, SJ04, Sut89, TW09, Vol69, ZL02. algébrique [CB89].

algébriques [SB97].

algebrique [CB89].

algorithm [Hee78, NM98, Son16]. algorithmes [AL00].

Algorithmic [Sle82, FKIA15], algorithms [AL00, Ste83, Tho94a].

Alienation [RR17, Wil16b]. alignment [GFJ13]. Alison [Art15a]. alive [Whi87].

Allocation [Fre69a]. Almost [Sfa13]. among [AV76, Bic82, Bui76, Con77, De 94, Dem93, Mas69, Rou68]. answer [Bag73].

Analysed [Rut05, Ped07]. Analyses [PRR08, CW96, Sim15]. analysi [Wit80]. Analyzing [Dah04]. Analysis [BH05, Bus05, CGS76, DWMB05b, DWMB05a, Duv06, FV13, FG17, GBR05, II05, KC12, MPZ16, NH94, RR05, Ryv06, SG98a, An79, Bec77, BZ01, Ber08, Bra11, BC12, DS02, Dow96, Enr16b, FE09, FT00, GT95, Gra91, GMHG09, GM84a, GM84b, GB13, GB17, HEW07, Ior17, Kap70, Kir69, Kle02, Kle12, KL14, MCV13, Miy17, MRC18, NK77, Rad00, Rev69, RC94, SP16, Ste69b, TK14, TB09, Tri15, TD01, TD03].

Anniversary [Bag08a]. announce [FB17]. Announcement [Ano75a, Ano81a, Ano82a, Ano82b, Ano83a, Ano83b, Ano83c, Ano83d, Ano84a, Ano85a, Ano85b, Ano86a, Ano86b, Ano86c, Ano87a, Ano87b, Ano88a, Ano88b, Ano90a, Ano90b, Ano91a, Ano91b, Ano92b, Ano93a, Ano94a, Ano94b, Ano94c, Ano94d, Ano95a, Ano95b, Ano95c, Ano96a, Ano96b, Ano96c, Ano94c, Her04, Hlb05, Hud94, Ano81c, Ano84d, Ano85c, Ano88f, Ano88g].

Announcements [Ano76a, Ano78a, Ano80a, Ano80b, Ano84b, Ano87c, Ano92c]. ans [AV76, Bic82, Bui76, Con77, De 94, Dem93, Mas69, Rou68]. answer [Bag73].

Answering [Sfa15]. Answers [AR07, RDH10, Woo16]. Anthony [LX16].

Anthropology [Rad06, Con90]. Anthropomorphizing [Sri18].

anticipations [Cob85]. anticipatory [Tzu07], anwendungsorientierte [Bec77]. Anxiety [New98, Wil97, Bek10, LC15]. any [O'C01]. Anyway [Wil97]. auût [Fre69a]. apart [LK18]. APOS
Assessors [Wat00]. assimilation [Une73]. assisted [GS72, GS76].
Assisting [BSF96]. Associated [Mes04, Kie81, WM01]. associating [Joh15].
assumption [MWSS17]. associativity [SL74]. assumptions [Kle12].
Astonishment [Rot17]. astray [BSV95]. Asymmetry [SJ17].
ATD [BGT17]. Attached [Dim04]. attainers [Bac89].
Attaining [BSF96]. Associated [Mes04, Kie81, WM01]. associating [Joh15].
association [MWSS17]. associativity [SL74]. assumptions [Kle12].
Astonishment [Rot17]. astray [BSV95]. Asymmetry [SJ17].
commonalities [Bur02b]. commonly [Hew12]. communicate [BCLH89]. Communicating [SLP06, Sfa01, Win11, Woo12]. Communication [Big70, Kae94, Ong06, BH95, HP08, NR10, RNP13, SS15, Wil09]. Communicational [Par16, Ste05, TN16]. communications [FE09, HI94, Ng16]. communicative [FT03, TDEM13]. communities [Bro14a]. Community [Boa99, WM09, Elb03, FA01, GC90b, Gra04, Mog17, Nar16]. Commutative [SS06]. commutativity [SL74]. Comparative [And09, Miy17, War06, Bra11, FZ07, Gal82, JI15, LCD90, MRRF94]. compared [Fre75]. Comparing [BWD10, Hin15, WM98, Fos18]. Comparison [BCFC90, ČK15, CBF07, Pug04, Tsa99, WAL18, AH00, CR09, Cla92, CF00a, Cor17, DT08, FKC17, GCALB15, HC14, KV75, SLC95, SHAC01]. comparisons [FLT14, Rob90]. compass [Cha98]. compensation [Dem93]. competence [Abr01, CLR16, EN79, FT03, Fos16, GMHG09, Hie88, TH13, Urb03, CLR16]. competencies [KBK^+17a, KBK^+17b, LLHL13, Sae09]. competing [ES03]. complement [DeB97, De97]. Complementarity [Ott03]. Complementary [Wit71, Kid08, Wit81]. completed [RW11a, RW11b]. completely [Sur77]. completeness [Ber08]. Complex [Lab00, DS17, Gol03, KRHD15, LMCG08]. complexities [Mat03]. Complexity [ODV06, BWD10, Gri83, JP09, Kap09b, LE09, Pla18, Tho93, Was15]. Components [Cop98, Kun12, Kry88b]. comportement [Add72, KC73]. Composantes [Cop98]. Composants [Kry88b]. Comprehending [Uhl02, Bur02a, DRR02]. Comprehension [CF00b, Duv06, Öst06, Gel98, MRFW^+12, Rob75, YL08, Yan12]. comprendre [Kra92]. comptage [TB09]. computation [CB89, MNRR95, PLW81]. Computational [Edw84, JS99, JM74, Zah15]. Computer [Ern86, GH89, GS76, VL04, AP75, BC92, CJ75, CBSS96, Dag96, Gan92, GBE13, GS72, HC95, HKG89, Jah83, Kor03, Kyn93, MG00b, Nos88, RH02, Sam85, Sni07, SW94, SLJ69, Sut89, TA08, TT91, TPHS07, Thw69, Wal08, You68]. Computer-assisted [GS76, GS72]. Computer-Based [VL04, CBSS96, GBE13, RH02, SLJ69]. computer-provided [HC95]. Computerized [Kap01, HN96, Tro04]. computing [Art97]. conceiving [TLM07]. Concept [BM08, DWMB05b, DWMB05a, FB08, Has97, HM95, LW99, PLW81, Prz05, TV81, BS80, DPG89, FYAE12, Fis77, FJC95, Fre69c, Fre93, Gel04, Güc13, KC12, Kor03, MO81, MRCR11, Noc80a, Noc80b, Rdl96, Ryv04, Sa703, Sam85, Sem08, Sim17, Ste91, Str78, TP14, Vin76, Vin77, WSR11, Wit73a, Wit73b]. conception [BDHN92, MPGDA12, Mos98, PP12, Sim17, TT07, Tzu07]. Conceptions [GT95, ST02, Sch11a, AV08, AH00, Boa02, BHN10, BF96, GS18, HS13a, HK84, LK16, MK97, NH15, Par91, RT09, Sfa91, ST10, TK14, Tha10, Tho84, Woo12].
content-oriented [KS69]. Contents [Ano01a, Ano02b, Ano04h, Ano06a, Ano00i, Ano00j, Ano01f, Ano02g, Ano02h, Ano03e, Ano03f, Ano03g].

contests [Ano69]. Context [Cha06, Don99, GD99, LK14a, Men07, SA07, Sty07, ZC06, AVM15, BFG84, Bis88c, Boa93, CV16, FKC17, Kru13a, LSH09, LH96, MMP15, MWVE09, MO94, Mwa02, NEM99, OSR71, PK17, SB97, SPFGF14, Swe95, TP14, TE14, Wed99, WvdHPD15, Yim10, ZWMR16, vO10]. context-based [WvdHPD15]. contexte [SB97]. Contexts [Baz90, DP99, Jur06, Lab00, Ano81b, Cob87, CF00a, LL99, SSP04, dA00].

contextual [HS14, KB11, Sae09, Van84]. contextualization [LK14a, NR10].

continues [Pre03]. Continuing [YSRU03]. continuite [Rev72]. continuity [HSZ17, Rev72, TV81, TK14]. continuous [Kid11].

Contradiction [BW13, HHS00, SRB16]. Contradictions [SPS17, Pai11].

contraposition [SSP04]. Contrasting [CH02, Jur06, EK10]. contre [BZ01].

contre-exemples [BZ01]. contribuer [Add72]. contribute [Jan74].

contributing [Add72, Buc87, Gli91, KAJHB10]. contribution [Kil01, Kra93, Pai16, Rot12].

control [AS11]. convention [MZ12, ZR18]. conventional [CZ11, DC17].

Convergence [AS04, AS05, Ber06, Prz05, Mar13]. conversation [Ken81, SZP10, TD12].

Covariation [HGM15]. cows [Vog70]. Create [Zas05, Ryv04].

Creating [Bro94, DZ00, PK92, GD17, GGR02, NT01, TS93]. Creative [HR00, Her11, Lit08, PK92, Her11].

Creativity [Fr77c, OZ85, Pre03, VS13, BHN10, Hay87, KLBMK+13, Shr10]. crisis [Cd04].

critères [Fre82]. Criteria [Fre82, Kno77]. Critical [Bra14, Che90, GFJ13, IE07, Kei82, RC04, SB12, AAB03, Bra11, BSW16, Bur90, CW14b, GM84a, GM84b, HP12, HC82, Kap74, LK16, RK17, RC02, Sko85, Sko94, VDWV04, Wei17, IRA16].


critiek [Gre17]. Critique [VS97, Lun12, Pai13, Wil16b].

Cross
[EJDT06, KL14, RR05, CL84, MCV13, SGTK14, VRP+12, YC95].

Cross-Analysis [RR05, KL14, MCV13]. cross-cultural [SGTK14, YC95].

cross-disciplinary [VRP+12]. Cross-Sectional [EJDT06]. Crossing
[LH06, BA14, Bak16]. crossroads [LHZ95]. crux [Fre74a]. cryptography
[Whi09]. CSMP [Ano71a, KS69]. cube [Gla70]. cubes [BHLH85]. cues
[NT75]. Cultural [Ano81b, GL00, Ber11, Bro12, Bur90, Car10, CL84, Cra12, Nos88, Sfa15, SGTK14, YC95, dA00, Sfa15]. Culturally
[Fit11, Cra12, Mat03, Mog17]. Culture [BHX97, Lou18, MHRSU99, SK98, SK07, Bis79b, Boa93, Che90, ETC14, Ger88a, Han12b, MPS12, NK17, Pre88, SJS12, vO01]. culture-conflict
[Pre88]. Culture-Specific [BHX97]. cultures [Bau92, CB17a, CB17b, Mit80, Nos01]. cups [CO10]. curious [Mar86].

Current [XH88, NK17]. curricula [BJJ13, Gri71, MRC18, NK17, SS10, WAL18]. Curricular
[BCFF+98, ZC06, CMW+13, CMH16, NK17]. Curriculum
[Ano76a, Coo98, HBB+07, Kap77, Keh82, NC06, Pop88, RC04, AAB03, CP10, Che89, CEMP04, Die15, GC90b, MKG94, RK17, RC02, Tay91, XH88].
custom [Her02a]. cut [Bos93]. CXC [Ern84a, Isa87]. cycle
[Bui76, Cas69c, Cas69b, Lev92, TSV82]. cycles [Sim94]. Cyclic [CB05].
cycloid [Bar75]. cyphering [Ste13]. Czechoslovakian [Vys75].

D [Ott76, Dam87, MP96]. d’addition [AL00]. d’aire [DPG89]. Dakar
[VD78]. d’analyse [GT95]. dans [Ano72a, AG02, BD72, Bos87, Bui76, Cal94, Cas69b, CGGG74, Dag96, DSB02, Dum82, DG98, FBM71, Hah99, Kon72, Kry68, Kry69b, Kry88b, bL00, Mas69, Mau85, Pro70, Rev72, Sar02, SB97, SSB76, Sw73, TSV82, Tro00, Van69b, VD78, VD79]. d’apprentissage
[DPG89, Tro00]. Data [Eng12, KHRK15, Leu05, MC01, WM98, AP15, AP01, AWP15, BZA01, CPPC18, FBO2, GT95, GB13, Han10, LH18, LT86, LMC08, Min83, RT14, VRP+12]. Dataset [Rut05]. David
[Jon16, LX16, Bye15]. Davydov [Ott76]. Davydov/D [Ott76]. day [Ano74b].

Def [Fro99, SLS74]. Debate [LH06, HGM15, WMPL08]. debutants
[Sam85]. decades [LK18]. d’échecs [Kon72]. decided [KP10]. Decimal
[MM00, BST81, O’C01, SHAC01, WEA90]. Decimals [OK05, GT90].

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[Cha71, Sid05, Chr69, Mes89, Mot71, Cha71, Mes89, Mot71]. Deductive
[AE08, Jon00, AM97, Duv91, Jan74, Kom16, MP14, MFS17, Sim96].

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[Sem08, WD05, Fre71, Mev83, SD13]. Deepening [ZC06]. deeper
[PXTW17]. Deficit [Sol06]. Define [TE97]. Defining
[MF97, AS17, OB11, Tay91]. definite [Jon18]. Definition
[OB06, MRCR11, Roh10, SG14, TV81, Vin76, WSR11]. definitional [Vin77].
definitions [OB11, Roh80, TN15, ZL08]. deformable [MP96].
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degre [PRR08, Rev72]. degree [Ger10]. 
d'degres [PRR08, Rev72]. degree [Ger10].
d'elevens [De 94, DS02, GT95]. Deliberate [STM06, BC12]. Delphi [MM11].
demand [Kue81]. demands [CW14b]. Demarches [PD77, ZP91].
democracy [Sko90]. democratic [Tay91].
demandes [Kuc81]. demands [CW14b].
demarches [STM06, BC12]. Delphi [MM11].
democracy [Sko90]. democratic [Tay91].
demand [Kuc81]. demands [CW14b].
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demand [Kue81]. demands [CW14b]. Demarches [PD77, ZP91].
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demand [Kuc81]. demands [CW14b].
demarches [STM06, BC12]. Delphi [MM11].
democracy [Sko90]. democratic [Tay91].
demand [Kuc81]. demands [CW14b].
demarches [STM06, BC12]. Delphi [MM11].
democracy [Sko90]. democratic [Tay91].

department [WD10]. depicts [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

department [WD10]. depicts [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

department-initiated [WD10]. depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

department [WD10]. depicts [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

department [WD10]. depicts [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].

depicted [TP15]. depth [Bek10, DVJV02, Han12a, HMA13].
Bur98, CDW14, EK10, For00, HDM07, HH11, HBZE98, Kar02, KR11, Par15b, Par15a, Par90, Rad09, Rob86, WJW11, YM16, dF16. Doctoral [AI08, GPW05, Her02b]. Document [An000d, Ano04d, BT05, FvM97, Blu02, GMNB18]. documentation [GMNB18, GT09, MR17]. Does [Ade90, Bro10a, FQL +17, FG84, GSH16a, How80, IIMR +11, VI04, BSV95, Eng76, FB17, GBC12, Mon00, Mor06, Sca75, YE16, GSH16b]. DOI [Sfa15]. doi.org [Sfa15]. Doing [Bur90, Cor17, LM11]. Domain [HbL05, Mos05, Gal02, Kon18, Kun12, RK17, Mor00]. domain-related [Kun12]. données [GT95]. don’t [WHE08]. door [Swe77]. dosage [CW14b]. double [Fri11]. douze [De 94]. down [Loc92]. Dr. [Pea76]. dragging [Ng16]. dragons [Vog70]. Drawing [CPP07, ST10, Bal86, Bus96, Lén93, Mit80, RSL17]. drawings [Bal86, CSG12, Ger88b, Mar86, MB09, VO17]. Dreyfus [Fit15b, Rad11]. dual [Sfa91]. d’un [Aud83, For69, LDM92, ZP91]. d’une [BC92, Bra68, CLR16, Her11, LD88]. d’université [BZ01]. duoethnography [ZK15]. duplication [Duv83]. During [DEM04, CCW95, CPK08, GB14, Jan09b, Kap01, Kru13a, PT09, Rad03]. Dutch [vSBvR00]. Duval [Rut02]. Duvalian [Ior17]. Dyadic [THS06]. Dynamic [GPW05, HHS00, Jon00, Lab00, MAHK08, PPC09, Rot16, Sin03, TY04, YS12]. dynamics [OCA13]. dynamique [Lab78].

E. [Bag08a]. each [Fra13, Sfa15]. Early [BBFG99, KPS83, Mos05, Neu99, CPPC18, FS16, Her02a, Kru13a, Sam85, Tak18, Van03a, VMM11, vdHPKR13]. ears [Sfa01]. earth [Ano84c]. East [Leu01, Leu05]. école [AR82, AG02, BD72, Cas69b, CDGG76, GPM69, Gla76a, Mar69, Roy81]. ecological [GBC12]. Economic [II05, Kae90]. Economy [Ass05]. Ed [Sfa13, All99]. edited [Bro11, JV17]. editor [Fit15a, Han98, Fit17, Tun04, Wil05]. Editorial [Ano85c, Ano88d, Ano98g, Ano99b, Ano00e, B.88, BW08, Bis79a, Bis85, Bis88a, Bis88b, Bis89, Dör90, Dör92, Dör93a, Dör93b, Dör94, Dör95a, Dör95b, Dör96, Dör97, Dör98, Goo14, Goo15, Goo16, Goo17, Goo18, JGM00, KFS01, Pre09, Pre10, Pre11, Pre12, Pre13a, Pre13b, Rut96, Rut00b, Rut00c, SL06, Sph01, Sph02, Sle03, Sle04, Sle05, Sle06, Str93b, Add87, Ano86d, Bel93a, BW12, Bus94, Cob94, Dref95, HJ93a, Lab92, Led95, Ler96, Mor14a, Rut98b, vG92]. Eds [Art15a, Bak16, Fit11, Fit15b, HJ12, Hes13, Jon16, Law16, LX16, MR17, Rad11, Rut02, SJS12, Sri18, Sta11, Wal17, Web18a, Eng99, Tsa02].
educated [BJJ13, VVV13]. Education [ABK+05, ACJO04, AF05, Ano72a, Ano00b, Ano04d, Ano16b, Bus05, CF03, CGGG74, Ern99, Fre69a, Fre78b, Fre82, GSE07, Gau99, GL00, GD99, GPW05, Kall13, Kei82, Kru13b, Kry79a, LH97, LH06, Leu01, Men07, Mor06, Nis99, Ons06, Rad12, Ser69, SK98, SK07, Web18a, Web18b, ZBHE06, Zev06, Zev06].
Ano69, Ano76e, Ano81b, Ano88e, Aud83, AH79, BGW+14, Bal90, BBS07, BGSW94, Beg69, BD72, Big70, Bis80, Bis88c, BWHM+10, Bia78, Bh02, Boy16, BP80, Bro01, Bro08a, Bro10b, BC12, BW12, Bro12, BSW16, BG69, Bur02b, Cas69c, CPP09, Chr90, D’A91, Dar16, Del68, Dör03a, Ehr78, El 78, El 86, Ely13, Ely10, Eng69, Eru16b, ES03, Fen79, Fer15, Fey78, Fey89, Fis69, Fit11, Fit14, Fit15b, FB17, FC08, FB11, Fre78c, Fre78d]. education [Fre79b, Fre81, Fur07, GCG+92, Ger81, Ger88a, GK79, Gof93, Gol03, Gra88, Gri83, GB17, Gui17, GB01, Gun78, HV78, Han10, Har81, HEWJ+15, HJ12, How73a, How73b, How78, How80, Hoy01, Jah83, Jan09a, Jan81, Jan07, JMD08, JV17, Jon18, Kap80, Kap78, KS69, Kei93, KFS01, Kol16, Kol18, KLBK+’13, Kry68, Lar86, Ler89, LXT02, Ler14, Lle12, Lle16, LMH70, LQV04, Lun12, Mac00, MCV13, ME13, Men71, Mor14a, Mor14b, MHH90, Mur95, Mwa02, Nar16, No12, NEN99, Ohu78, Ott07, PV12, Pai15, PA14, PvdHR12, PW03, Pur78, Qua92, RR17, Rev71, Rev72, Rev78, RL11, Ros78, Rot12, Rut94, Rut10, RNM12, SC17, Say94, Sca71, See11, Sen96, Sfa13, Sha78, Sii3, Sim94, Sim17, SEC13, Sko85, Sko90, Sko94, Sko16]. education [Sol95, Sra11, SW92, SB12, Str87, SS88, Ssw77, SC83, Tal80, Tao86, Tou90, Tre93, Tur93, Van93a, Van03b, VVV15, VD78, VD79, VCS95, Wlf78a, Wlf12, Wil66, Wil78b, Wit84, Wit95, Wit01, WK97, ZMD91, df12, df13, vO13, vSBvR00, Ano91c, BGW+16, Fit11, All99, Eng99, Bak16, Law16, Sra18]. Educational [Ano02c, Fit15a, IE07, VR90, Wal17, vO01, BDS+17, Hus87, Kla71, MOS1, Mog17, TE14, Pae76, Kae94]. educationally [HP12]. educative [YHL+15]. educator [LYHC18, YHL+15]. educator-researcher [LYHC18, YHL+15]. educators [Bag08b, ZZ11]. Effect [BNPG97, CMW+13, CHM16, CHM83, Gan92, KB11, Kor03, Lin90, Mar86, SHAC01, VVV13, ZSL02]. Effective [HHB07, LK16, NR10, RNP13, WL90, ZBB85]. education [Han89]. Eighth [CO10, Min83, SV09]. eignereits [Ott76]. Eight grade [SV09]. einseits [Ott76]. Einführung [Bec77]. Elaboration [LDM92, LDM92]. electrical [Rot14]. élémentaire [AR82, FPM69, Gla76a, Roy81, Sen96, TSV82]. Elementary [Cre06, FPM69, GB17, HDM07, HBH07, MF17, NN07, Sel01, Sty07, Tie02, Uhl02, Uhl03, War06, Ala12, And79, BH94, Bur02a, Cha18, Cs16, DRR02, Eng71, Fre74b, Gel98, Gla76a, GFWL11, GS76, GPPT99, HOS13, HC95, IWP+15, Jan09b, JM74, LS70, Law00, LK18, Nim75, Nos86, Phe10, RL13, Row08, Roy81, Sen96, Ste97, TA08, TSV82, Tie00, TG89, Tou86, TP15, ZZ11]. Elements [Bar07, Sed09, TLM07, TLM07]. élève [Aud83, BC78, BC82, Cop98]. Eleven [IT77, Dem93]. eleven-year-old [Dem93]. élèves [Sen96, Bal80, DeB97, Deb06, Dem93, Her11, Kon72, KC73, Rob86, Sam85, Siw73, VD78]. Elfriede [Ste94]. Elizabeth
[Fer15, HSNHHE15]. Elke [Gre17]. Elkonin [Ott76]. Ellerton [Ste13]. Ellipses [Rut02]. elliptic [KP10]. else [HNH03]. emancipation [Rad12]. embedded [RK17]. Embodied [Abr09, BR06, NEM99, Wil09, NF09]. embodiment [TR11, dFS12, dLT08]. Emergence [SS05a, AGP15, Dam87, FGG13, HMA11, Pro13]. Emergent [CB05, vO10, DR13, HS99, LE09, PAW15, Rad00]. emerging [Kie01]. Encouraging [Boa93, TT91]. Encrypted [Whi09]. Enculturation [PT09]. End [VS97, De 93, Une74, Her11, Lev92, Sen96]. Enough [Als02, Dho93]. enquêtes [Del68]. Enquiry [FA76]. enrollment [Ecc85, Wai70]. enfeeblement [Ham68]. enfant [Bic82, Com80]. enfants [AV76, Com77, Kra02, Mas69, Ron68, Van69b]. enfance [Ser68]. ensemble [TLM07]. Enseñanza [Cas98]. Entanglements [Fer15, HSNHHE15]. enterprise [AM14]. entre [Bal88, DG89, Her11]. entry [Kae90]. Entstehung [Dam87]. Entwicklung [JSV75]. Enumeration [MDD04]. Environment [GH98, Kap01, Mar00, BCFC90, BC96, Dag96, DG89, HSZ17, Kyn93, LDM92, MG00b, MN95, TAH08, Tro00, Wal12, Whi09, YS12]. Environments [Lab00, Art97, BdSCdA18, For95, HHS00, HN96, HS99, LH18, LBFM13, PK92, TY04, Tro04]. environment [Dag96, DG89, LDM92, Tro00]. Environnements [Tro04]. episode [Cli17, DGFT13]. Epistemic [RL13, RC94, SHAC01]. Epistemological [DGA05, Jah01, Ste97, Ste05, Ste06, Wil97, Hei75, NBZ12, Rad03, Ste87, WM09, WM113]. Epistemologies [So06, NPH99]. Epistemology [Han98, Kid16, Ott06, BP15, Bur95, Sch11a, Ste91]. éprouve
Experiencing [Asg09, KMT16]. Experiment [AP07, PBY03, Sel98, CSK12, Dou76, Hah14, Mat83, Mool13, Pro69, Rou68, Sha77, Smi70]. Experimental [FZ05, Or171, Fre77a, PRR08, RT14, Vys75]. experimental-mathematics [PRR08]. Experimentos [For69, For69]. Expertise [AP07, PBY03, Sel98, CSK12, Dou76, Hah14, Mat83, Mool13, Pro69, Rou68, Sha77, Smi70]. Experimentation [For69, For69]. Experiment [AP07, PBY03, Sel98, CSK12, Dou76, Hah14, Mat83, Mool13, Pro69, Rou68, Sha77, Smi70]. Expertise [AP07, PBY03, Sel98, CSK12, Dou76, Hah14, Mat83, Mool13, Pro69, Rou68, Sha77, Smi70].
frequencie [Fre72]. freshman [Gof77]. Freudenthal [Add93, Ano04c, Ano06b, Ano16c, Gre17, Van93b, Add93, Ano90d, Bos93, Kei93, Pea76, Str93b, Tre93, Van93a]. Fried [Fit15b]. frontiers [Ely10]. Fun [Moy01].

**Function**

ASP97, Slaj9, Bic82, BDHN92, Giag16, Lun12, MPG12, PSH+18, Par15b, Par15a, Prz04, Ron15, Saj03, San11, TN15, TK14, Yer00, ZER17. functional [Ber04, BBG+17, Vol86, Wil16a, YG99]. Functionality [Gor98].

**functioning** [Sam85]. Functions [AWL15, BEG05, Ham06, Mes04, Mos04, Blo03, BC96, CS94, Cor17, Eve90, FLM07, FBA10, GK71, Har90b, Kar92, Kol18, SD95, TMD10, WAL18, WT14, Whi09, Bos87]. Fundamental [DDLZ97, II05, Bur96, DDLZ94, Gri13, Hah75, Hei75, Law90, Mas69, MW09, Tho94b, Wit80]. Further [Bur06, Del69b, Gen70, IS09, MRW14, Tha10]. fuss [Sat09]. future [Fle71, GC90b, CGc+92, How75, CK14b, SB97, Str03, SS17].

future-oriented [LK14b]. futurologist [Tal08]. futures [SB97].

G [Sat15]. Gabriele [Hes13]. gains [NCMO15, SL94]. Game [Har09b, SE93, Gal73, LS79, Nil07, vdHPKR13].

Games [Bas69, SL06, Kni12, SK09].

general [Ber06, Bur05, WS08]. Generating [SMSW13b, SLC95, HGK89, IMR+11, Shr10, SMSW13a].

Generation [DH97]. generative [RL04]. Generators [BC05]. Generic [MP84, YE16].

**Generic** [Sch83, Zas71, FP07]. genre [PW03]. geoboard [Har74, Har75].

**Geology** [Wit05]. géomètre [AG02]. Geometric [Lev71, MBBD05, Nar00, Car10, FQL+17, HGK89, KR11, McD89, VO17, WR96, Yan11].

Geometrical [Eng71, Kyn93, TMP10, CH13, GP90, Ger88a, GB01, KSL11, LL13, Mit80, PPP14]. géométrie [Aud83, CDGG76, CLR16, Hol69, HK99, Mes89].

geometries [St76]. Geometrieunterricht [Wal76]. Geometry [Ano71b, Ano74b, Bar07, BH11, Fre71, HHS00, Jon00, Lab00, LR81, Ano71a, AG02, Aud83, BS80, Bjo04, Bos93, Bra11, CDGG76, Cha93, Chi98, CLR16, Cox71, Egs70, Eru86, Fie79, Fle71, Fle76, GL10, Gal11, Gla70, Goo07, Her02a, Hol69, HK99, Hoz81, KP10, Kel71, Klc71, Kom17, KR11, LG13, LBMM13, LL13, MG00b, Men71, Mes89, Miy17, Par88, PPC09, PC10, Pro69, Rev71, Rob12, Rog71, Roo71, Rot14, SC+16, Sch71, ST08, Sen70, SC90, Sin03, Ste71, Sto71, TY04, Tou90, Tri95, Vau71, Vil71, Vol76, Wal73a, Wal76, WH15b, YL08, Yan12, WH15a].

**German**
[Bec77, Beh68, Bra13, JSV75, Sel01, Van76, Wal76]. Germany
[Ano74b]. Gestalt [Sha98]. Gestation [DG89], gesture
[YTD11, dFS12]. Gestures [APRS09, Edw09, ART15b, CH13, FS16, HH11,
LLD14, MB09, Ng16, Rad09, Sfa09, WFCW15, YTD11]. Gesturing [ZW11].
Getting [SWG05]. Ghosts [Har87, Vog70], gifted
[Lar86, SOC86, Tao86, WZ86]. giftedness [Pre86]. Giorgio [D’A10].
Giorgiutti [Rut02]. girl [FSB18, PSE87]. girls
[CWT12, Fen79, FPCL90, Han89, KAJHB10, Led80]. Give [NN07]. given
[CMdR18]. giving [Van77]. Glasesfeld [Ste98]. Glenda [LX16]. Global
[Hud90, Als02, BZA01, ETC14, Kun12, TE14]. go [BSV95]. goal [Jan10].
Goals [Han06, MHDC04, Kei82, LE09]. Godfrey [How73a, How73b]. goes
[Ano16b, Ano16c]. Going [Gat06]. gone [Her02b]. Gons [Bac71]. Good
[Bat13, Rad11, Sfa05, BW13]. goodness [Kno77]. government [Baz88].
Governmental [Lar86]. Grade
[Alb00, AF05, BCFF’98, CRL06, Eng97, GL98, Nte06, PBY03, RR05, Sel98,
ZS07, BBG+17, CO10, Che89, CWYP92, CGS76, CBS12, CSK12, Une74,
Eng12, FV13, FG17, For59, For69, Han89, Has97, JHC14, JTP94, JE14, LH71,
Lev10, LC15, Min83, RRP91, Rog71, Sem70, Sin00, SV09, TD12, VD78, VD79].
Grader [OK05, SLW98]. graders [GT90]. Grades
[Rut05, WN04, Fre74b, Jur77, Pet91, TF95, Tch11, Var72, Wal73b].
Graduate [Car99, DSO5], graduates [Gal82], graduating [KLLJ17]. Grail
[Lie12]. grain [Tzu07]. grand [Jou13]. Graph
[Nim75, FBA10, Kar16, RT14, WWFC16, YS12]. Graphen [Wal76].
graphes [Bal80, CGGGG74]. graphic [Blo03, GT00, MK97, Ric04, Rut90].
Graphical [ASP97, Ola14, Riv07, Jon18, ZWMR16, Cal94]. graphics
[Bro10a, FT03]. Graphing [DZ00, QM94, RDH09]. graphique [Ric04].
graphiques [Cal94]. Graphs
[CGGGG74, Abe78, Bal80, NBHK07, RL04, Sed99, Wal76, WT14]. grasp
[TO13]. Gravemeijer [HJ12]. gravitation [CGGGG79a], great
[Law16, How78]. greater [Tab13]. Greek [Sid05, SK07, Tou90]. Greer
[Fit11, Sel00]. Griffiths [JMD08], ground [Fit15b]. Grounded [YTD11].
Grounding [Baz01, NEM99, WD10]. Group [Dah04, DDLZ97, Fre78b, JS99,
Nar00, Bal90, BJ88, Bur96, Dek87, DDLZ94, GGR02, Hah75, Hoy85, IT77,
LHZ95, MGP75, O’C01, RNP13, Sha77, TS18, Tru15, WMPI08]. grouping
[Wir73a, Wir73b]. groupings [Wir75]. Groups [Cret06, GPW05]. Growing
[KH80, MT15, Rot16]. Growing-making [Rot16]. Growth
[ART15b, PK94, Ron15, LHYC18, WCO8, Win11]. guessing [Kom16]. Guest
[Add87, Ano86d, Ano99b, Bej93a, Bur94, Cob94, Dre95, HJ39a, Han98,
JGM00, KFS01, Lab92, Led95, Ler96, Mor14a, Rut89b, SLP06, vG92, BW12].
Guidance [GPW05, ZBBZ85]. Guide [AAT99, Eng06]. Guiding
[DC17, Kol16]. Guinea [Sfa15, Kae93, Sou83, Kae94]. Guinean [Cla83].

hand-held [Hed85]. Handbook [Law16]. handed [Tro00]. handicapped
handle [Nil07], Handling [BG05], Hans [Ano04c, Ano06b, Gre17, Ano90d, Ano16c, Kei93, Van93b], Hardback [Sfa15], Harsh [dF12], hater [AVM15], Hating [Lun12], Hauke [Sri18], Having [MT15, Moy01], Hawai'i [WL90], head [Lan86a], Heather [Bro11], Hedges [Row95], Heidegger [Bag10], held [Ano74b, Hed85, Mur93, Mur95], Help [HPG05, NN07, GSH16a, GSH16b, JI15, PG93, Ram03, vdS11], helpful [vLXD18], Hemispheric [Fid85], here [FC12, FM09], here [SRB16], Hermeneutics [Bro91], Herscovics [Ber94], Hershkowitz [Rad11], heterogeneites [Sar02], Heterogeneities [Sar02], Heuristic [Hug74, Bal71, CM92, Fle68], HF [Gof93], hiatus [FB17], Hidden [Bau80, Bau80], Hierarchies [Ber81], High [BBEG05, Cha93, Cla93, Dar04, Jur06, Lev71, Al12, BZA01, Bra14, FJC95, For69, Goo07, Gut92, HS13a, HMM18, Hui71, Kar02, Kei71, Kle71, Kra93, Mar96, MRC18, Par91, Pre92b, Pro70, VS13, ZER17], high-school [FJC95, MRC18], higher [BWHM10, Jain07, SC83], highly [Bon14, KS69], Hindrance [Vla02], hint [PG93], Historical [BG06, DWMB05b, DWMB05a, RP07, Ai07, BP15, Cle79, GB01, MAHK08, PGM13, Swe95, TT07], Historically [Ber06, Ber06], History [Cla12, Fri07, Gui17, KB07, Kle01, Sid05, Web18a, Web18b, CPP09, FP07, FV97, Fux07, GB01, Jan09a, Jan10, KB12, Law16, LC15, Ott07, Sch18, Ste13, Str03, WqWLR18], Holton [Jon16], Holy [Lec12], homework [Lan13, LM11, Ma96], Homo [Add93], homogeneous [NT01], Hong [Che88, Che89, Leu95], horizon [Sch16], horses [Gri87], Houdebine [Rut02], hows [Jan09a], Hoyles [Sta11, Gai11], https [Sfa15], Hui [Siu93], Human [Win11, Cra96], Humanities [Sie87], humans [Bye15], hundred [Ano00b], Hungarian [AH00, CK12], Hungary [Ano88c, HV78], Husserlian [ZS15], Hwang [MPS12], hybridity [SRB16], hypothese [Boa02].

I.G.P.M.E [Fre78b], ICME [Bal90], ICME-6 [Bal90], ICMII
[Ano00d, Ano04c, Ano04d, Ano14b, Art05, GL00, HBL05, Ano69, Ano98i, Ano99b, Ano14a, Art02, Art05, BT05, Bln02, FV97], IDEA
[Kru13b, GT95], ideal [Kla71], Ideas [Ehr78, El78, Fey78, Fre78d, Gun78, Mon01, Ohi78, Pur78, Ram03, Ros78, Wil78a, Wil78b, Bla78, Egs70, Fra13, Fre78c, HV78, Hei75, How78, Kaplan, Mas69, Rev78, Sha78, Witt80, Sfa15], idées [Mas69], Identification [WZ86], identifications [dF12], identify [EJ13, MWV09], identities [BWHM10, BW13, Bro11, KPS17, RL11], Identity [Dar16, Lelu01, AVM15, BWHM10, ETC14, HP08, HM13, HMA13, LK14b, LK18, SJS12, Tk18, dF12], ideological [Bur90, Lun12], ideology [Lou16, Pai13], idiosyncratic [Tho94a], IEA [Baz90, Fre75, Pca76, Rob90], If [Par15a, Par15b], ignored [PvdHPR12], II [Baz90, DB86b, HH78, Noe90b], III [Had94], illuminate [RDH10], illuminating [Cla12], Illusion [VDD03], illusions [Rad12], Illustration [SL05], im [Dam87, Van76], Image
In [Fis77, MT15, BM08, KD14, MRCR11, Sem08, TV81], Imagery [ASP97, LC81]. Images [Mur93, Mur95, Narro00, Prz04, Tho94b, ETC14, Jon18, Mar13, PB00, Roli08, WSR11, WT14]. Imagination [NBD*04, KC09, NF09, Pre92a]. imaginative [Pre92b], imagineer [Tal08]. imitative [Lits08]. imaginative [Pre92b], imagineer [Tal08]. imitative [Lits08].

Impact [Bus05, FKIA15, Mal93, Pal08, Cla85, FV13, FB11, Lam15, SS93a, VDWV04]. Implementation [Zaz99]. Implementing [MG00a, CP10, HN08, kSL13]. Implication [DS02, GT95, Dm90, HK02, Vre69]. Implications [ES03, GC90b, KB07, O'B77, Prz04, Tho94b, ETC14, Jon18, Mar13, PB00, Roh08, WSR11, WT14]. implication [Zaz99]. Implementing [MG00a, CP10, HN08, kSL13]. Implication [DS02, GT95, Dm90, HK02, Vre69]. Implications [ES03, GC90b, KB07, O'B77, Prz04, Tho94b, ETC14, Jon18, Mar13, PB00, Roh08, WSR11, WT14].

Inhelder [Kap74]. initial [Hod96, PH96]. initiated [WD14]. initiating [Mey10]. Initiation [FPM69, Gla68, Gla69, AM97, FBM71, Hol69, vO01, FPM69]. inner [SG08]. inner-city [SG08]. Innocence [VS97]. Innovation [BEW99, Ern84a, vO13]. innumeracy [Tre91]. Inquiry [Adl97, Tou71, Zaz98, CP10, Elb03, GFJ13, Han12a]. inquiry-based [GFJ13]. inserted [BF96]. inservice [SS93a]. Inside-Out [Alb00]. Insight [Mac78, Gri71]. Insights [GT90, Wal17, Woo90, YM16, CPP09, PPCP18, HJ12, MS14, WWFC16]. Inspired [Ber06, Bur05]. inspiring [KMT16]. instance [Mos98]. instances [SL74]. instantaneous [Sch92]. Institute [Van93a]. Institutional [Pop88, RG01, AV08, Har09a]. Institutions [Cas04, SC83]. Instruction [Ano04c, Art05, Ano78b, Bat13, Beg71, BN91, BR89, CHM83, Chr69, CR09, CBSP12, Def69b, FKIA15, Ge98, GBE13, GS72, GS76, Han12b, Han12d, Hes13, HC82, Kaa93, KMA02, Lev81, Mat03, NK17, Ano95e, Ano94d, How84, Ts02, Ric10]. Instructional [AAT99, Han10, MHDC04, Ade98, Bra11, CDW14, CBSS96, Kae90, Tho84]. Instructions [Ano00f, Ano00g, Ano01b, Ano01c, Ano01d, Ano01e, Ano04e, Dim04, SS05b, Ano02d, Ano02e, Ano02f, Ano03c, Ano03d, Ano04f, Ano04g]. instructor [FC12, HOS13, TJJH11, WFCW15]. instructors [MG12]. Instrument [BP80, DB86a]. instrumental [DDB+10]. Instrumentalism [MO81]. instrumenté [CLR16]. Instrumented [Riv07, CLR16, Kid08]. instruments [FLM07]. integer [Lie90]. integers [Gal92]. integral [Jon18]. Integrated [FGA94, Kry69a, Tre87, HP08]. Integrating [Eve99, NBZ12, CP10, WqWR18, Wit84, bL00]. Integration [Ass05, AG02, BA14, Boa93, Edw09, Fre69c, GBE13, LE09, NK17, Ort83b, Sch12, AG02, Cas69c, Fre69d, bL00, Cas69c, Fre69d]. intégré [Kry69a]. intellectual [Fis69, Han68, Hey07, Kap99b]. intellectually [SOC86]. intellectuel [Fis69]. intelligence [MY84]. intelligent [HOE89]. intensive [TAH08]. intention [PB09]. intentionality [Sko16]. interacting [Sch11a]. Interaction [CYW92, DEM98, Jun91, MHRSU99, Mos04, Rad11, SS05a, Ste06, Bar03, Elb03, KP10, KH07, Led87b, Lor82, RR11, Ste97, TL15, TZLT95, Rad11]. interactional [Kle12]. Interactions [AS04, AS05, AS17, BdSCdA18, Fli05, Sol06, XM17, Bat13, CF00a, HM13, RNM12, WSR11, dA00]. Interactive [BS94, OPC+98, BH94, LSH90, PPG95]. intercept [Mos98]. Intercorporeality [RR11]. interdependence [Tay91]. interdisciplinary [Con90, KLBMK+13]. interest [SLP+12]. interface [MPS12, Wak14]. interfering [NT75]. Intergenerational [Zev04]. interior [DF04]. intermediate [Hed85]. internal [Kae93, Kae94]. International [Ano70, Ano71c, Ano72b, Ano74c, Ano74d, Ano76b, Ano76g, Ano77c, Ano77b, Ano78d, Ano91c, Ano04e, Ano04d, Fre78b, Han98, Ric10, RD92, Bal90, BGSW94, DT08, FLT14, Fre69a, Hes13, TE14, Ano74b, Ano95e, Art05, How84]. internationally [Fre75]. Internet [EH05a, EH05b].
Interplay [MMBD05, Ste05, CH13, Kid11, MYM12, Ng16]. Interpret [NC06, Son13]. Interpretation [Coo98, Rut05, LT86, RT14, Sko16]. Interpretations [Jon00, SILW98, Cal12, Debo6, ES03, Debo6]. interpreted [BGT17]. Interpreting [RL04, SL06, Wal12, WM01]. Interrelated [HMT13]. interrogation [Wal10]. intersection [Pai16, Wei17]. intersections [dF04]. Intertextuality [RFP14]. intervening [Bis76]. intervention [BGW14, BGW16, BJ88, Debo6, FQL17, Feh99, SS91]. intervention-based [FQL17]. Interventions [DEM04, Lun77, NK17, SS17]. Interviews [Coo98, Dah04, HBZE98, HS13b, KH07]. into/influencing [Jaw03]. intrinsic [Kyn93, WS18]. introduce [WS08]. Introducing [AP01, Har75, Prz05, WBM14, ZK15]. Introducing [Dar03b, FWM85, LGP05, LH08, Mar00, RKF07, REA09, VBT12, ZBEH06, AL00, BBS07, Bec77, BW08, Bro10a, GB14, Kru13b, Law16, Pap71, Pic71, RD92, Glai68]. introductory [CJ75, Sha77]. Intuiting [Gri13]. Intuition [LW99, Tsa07, BR78, FTH79, Mac78, MF10, Sem08, Tal80, ZS15]. Intuitions [FBM71, FG97, Fis99, FG84, Kid11, VVV13]. Intuitive [MH70, MD01, SH01, VV02]. inventaire [BD72]. invented [Son16]. inventory [BD72, LC13]. Inverse [PSH18, RL12, SPNH12]. Inversion [Gre12, NBE12, Sch12]. Inversive [Cox71]. Investigating [Bon14, CWL07, Gra04, Gue08, KC09, Nte06, PB00, Tha10, Wat80, Mey10, WSR11]. Investigation [DS06, PW03, Ang89, Cob87, FT03, Gal81, Hod96, LS70, LG13, Mat81, MRSP14, Rot17, SM72, Ste97, VP13, Wil71, YC95, dPH13, PW03]. investigations [HI94, Hir81, vSBvR00]. invisible [RM15]. invitation [WHE08]. invitations [PKP18]. involved [BD72, Ior17, Joh15]. involvement [KLLJ17, Tak18, Tao82, DS02]. Involving [DVJ98, AG14, Dums82, OB11, SW95]. invariants [LBFM13]. inventaire [BD72]. Irish [RO09]. Irrational [SZ07, FJC95]. irressistibility [DVJ12]. ISBN [Sfa15]. Isomorphism [LS70, LHZ95]. Israel [MA09]. Israeli [WAL18]. Issue [Hof06, NBD04, AP01, Bro88b, PR08, TP14]. Issues [DWMB05b, DWMB05a, Spe05, AL78, BBS07, BN91, GB14, HS14, Pop88]. Italian [Baz88]. Items [Eva07, DH90, Kuc81, Ola14, SJ17]. Iteration [Wei91]. iterative [RW11a, RW11b]. itself [FB17]. IX [Reg71].
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knots [MP96]. Know [Bur98, DS06, MM00, Pol76, Swe95, Wed99].
Knowing [Coo99, Gra99, Par88, Boa02, Bro94, MS99, Rad14, Sim96, Law00].
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Linguistic

Literate

Linking

Listening

Literacies

Literate

Literature

Logical

Logics
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[Hol81, HMA13, HP03, How78, How80, Hoy82, Hoy85, Hoy01, Hoy07, Hud90, Hug74, HMT13, IWF+15, Ior17, Ior18, Jan09a, Jan90b, Jan81, JPO9, JKL17, JM74, Jin07, Jon82, JMD08, JV17, Jon18, JGR14, Jon13, Kae88, Kae90, Kae93, Kae94, KM93, KBK+17, KLT14, Kap90a, Kap70, Kar02, Kar10, KS69, KWF15, KT01, Kei93, KL82, KFS01, Kie01, KR12, Kla68, Kle02, Kle12, KH07, Kol16, Kol18, Kom16, KMT16, KC09, Kra93, KR09, KLBK+13, Kru13b, Kry88b, Kuc81, LK14a, Lam15, LS70, Lan81, Lan13, LM11, LZ08, LSH09, Law16, Law00, Led80, Led85, LSW13, LW07, Ler89, LXT02, Ler14, Leu87, Leu95, Lev81, LX16, Lib77, LC13, LC15, Lin88, Lle12, Lle16, LW94, LMH70, Lor82, Lou18, Lun12, Lun77, Lyn68, Ma96, Mac78].
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[MGp75, Mac00, Mai85, Mal93, MK91, MCV13, Mar69, MF17, MSdSGG16, MS99, Mat03, MCc14, MS14, MCQ86, ME13, MR17, MRFW+12, MG12, MY84, Mog17, MAHK08, Mor14a, Mor14b, MO94, MRC18, MA09, Mur93, Mur95, Mwa02, NBZ12, Nar16, NCMO15, NR10, No12, No16, Nor15, Nos01, NEM99, Ohu78, OKL87, PV12, Pai13, Pa15, PKP+18, PRR08, PA14, PXTW17, Phe10, PF09, PB09, Pim90, PW03, PK92, Pis68, Pla14, Plt97, Plt90, Pol69, PSE87, PMG+94, Pop88, FNH98, Pre88, Pre92b, Pr07, Pr08, Pro13, Pur78, Qua92, RR17, RW11a, RW11b, RL00, Rel96, RK17, RR80, Rev68, Rev78, RL13, Rob95, Rob90, RL11, Ros78, Rot12, RM15, Rot16, Rot17, Ron68, Ron95, Ron08, RC02, RMA98, Rut87, Rut89a, Rut94, RH02, mathematics [RDH09, Rut10, RNN12, RNP13, SJ17, SS15, Sar02, Say94, SBDM69, Sca75, Sch12, Sch11a, ST08, Šed76, Sec11, Ser68, Ser76, SA00, Sfa13, SJS12, Sha78, SD13, Si13, SS91, SS93a, Sim94, Sim17, SS03, SEC13, Siw73, Sko94, Sko16, Sol95, Sol12, Sri81, SV09, Sta11, SW92, Ste13, Ste97, SG98b, SB12, SPS17, SPFGF14, Str87, Str93a, Sun11, SLW83, SS88, SW14, Sve77, TN16, TS18, TL15, Tak18, TV81, Ta108, TMLT95, TA08, Tar09, Tav68, Tay91, Tay96, Tch11, TR11, Tho84, TPHS07, Thw69, Tie00, Tre93, Tre83, TJHD11, Van93a, Van03b, Van69b, Van76, VD78, VD79, Var76, VA18, VM78, Vin76, VCS95, Vol94, Vol76, WHE08, WHE09, Wag12, Wai70, Wak14, WBM+14, Wal12, Wal17, WqWLR18, Wkd99, WW11], mathematics [WFCW15, WHC09, Wha96, Whe92, WM09, WL90, WvdHPD15, WJW11, WS18, Wil71, Wil78a, Wil12, Wil16b, Wil78b, Wit69, Wit84, Wit01, Woo96, Woo12, WKB97, XH88, YHL+15, Yan11, ZZ11, Zep81, Zev11, ZZ08, dA00, dF04, dF12, dFS12, dFS13, dF16, IAR16, vO13, vS11, Fer15, HSNHHE15, MF17, Nim77, Sta11, TB09, Kae94, Fit11, Fit15b, Mathematics-for-Teaching [DS06, Os12]. mathematics-teaching [Rou68]. Mathematiklehrerberufe [Dam87]. Mathematikunterricht [Van76]. Mathématique [Nim77, Add72, BDE72, Bos87, Cal94, De 94, Del68, DP77, FS69, Fre69a, Fre82, Her11, Kry69b, Kry88b, LS79, Rou68, Rou69, Ser68, Ser69, Ser76, Siw73, VD78, Ano00h]. Mathématiques [Cop98, TB09, Add75, Add76, Ano72a, AP75, Bal80, Cas69c, Cas77, Deb06, Del69a, DuV83, For69, Gro77, Hah99, KC73, Mar69, Mas69, PRR08, Pis68, Phu79, Rev68, Rob95, Rom74, Sar02, Tro04, Van69b, VD79]. mathématiques/réalité [Hah99]. matheématisation [Kry68]. mathematization [Ste68, Ste69a, Tre83]. Mathematizing [Pre03, Wit76, HMG16, Win11]. mathephobia [RR80]. Maths [MRRF94, SE93, All85, Als02, AVM15, BG69, Chr00, JN15]. matrices [Fl68, Roo71]. Matter [Bes07, WW02, BN96, BS94, Eve90, ET95, Fer15, Rad09, Fit11]. matters [Dom11]. mature [Kae93, Kae94, SBP11]. maturity [Hee78]. Maximizing [McN00]. may [BHX97, PB09]. McNamara [dF12]. me [Fri11]. Mean [BG06, PLW81]. Meaning [Bre98, Chr97, DZ00, Rad06, RP07, Abr09, Cla02, FA76, Han12b, KP10, MB09, MWVE09, Pre92a, RKF07, RSS11, Sec11,
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neo-literate [Kae88, Kae90]. neo-Vygotskian [RR17, Wil16b]. nerd
[FSB18]. Nerida [Ste13]. n'est [Gla76b]. Netherlands [Fre78d]. network
[WWFC16]. networked [BDS+17]. Networking
[AM14, Bak16, Kid16, Bak16]. networks [BDS+17]. Netz [Sid05].
neurology [Tho85]. never [TT01]. never-ending [TT01]. Newly [Ryv06].
Newspaper [Adl88]. Newspaper-based [Adl88]. Next [HN08, Hoy01].
Nexus [GH98]. Nicolas [Ber94]. Nigel [Wal12]. Nigeria [Ale81, Olu78].
[Car08]. nombre [BC78, BC82, Com77, Com80]. nominal [GB13].
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[Got98, Add72, AL00, KZ94, PEG09, Rob95, Ste76]. non-mathematicians
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[AS05]. Norma [JV17]. Normal [Wit97]. Normalising [APN01]. norms
[BBC+17, Gro77, Hsw12, MS97, ZL02]. Notations [Bri06, Gro77]. note
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[Ma85, O'B70]. Nothing [PM97]. Notice [Ano80c, Ano89b, Ano92c].
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[I05, IB05, Men07, Zev04, Edw84, GCC+92, HMG16, MB16, TE14].
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[SK13, WR96]. Numerical [Ber06, Fli05, IB05, Une74, Gla68, HC95, LL99,
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Obituary [D'A10]. Object [LPG05, Bal88, TLM07]. Objectification
[San11, MRSP14, ZS15]. Objective [And79, And89]. objectives [And09].
Objects [Ior17, Bal88, Duv83, FGG13, GFWL11, MTBR16, SD95, Sfa91,
TN15, WMPL08, Whi09]. objet [Bal88, TLM07]. objets [Duv83].
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[Str78, WBM+14]. observations [Del68]. Observer [Add82]. Observing
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[CRPPRG16, GP17, SR92, Sko88, Wol83, DB86a, DB86b, DWMB05b,
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[GP17]. part-whole [CRPPRG16]. Partially [RDH10]. participants
[Ano68a]. participate [Jan09b, Nol11, PKP+18]. Participation
[Boa99, GMHG09, HP08, IWF+15, Her02b, Bro11]. Participatory
[Adl97, Tzu07]. particular [FC08, MP84, TV81]. partitioning
[CN00, DH90]. Partitions [Ham06]. partnered [Kie01]. partnerships
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[Die71]. passion [Rot17]. past [RFK07, SS17]. path [GLZBZ15]. Pathways
[FB11, GP17]. patriarchal [Mog17]. Pattern
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[HSZ17, TPHS07]. pensé [Ano72a, De 94, Van94]. People
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[CBF07, Tsa01]. Perceiving [KRHD15]. percentage [Hah99, Van94, Van03b]. percents
[SZP10]. Perception [MHDC04, BH11, CW14a, GL10, LL13, VD78, VD79].
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[TTL+13]. performing [Tru15]. Perhaps [STM06]. period [Dho93].
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[SS88]. Personality [Hea81]. Perspective
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SS91, SS93a, SS88, Wil09, ZS15, vLXD18, Hes13]. Perspectives
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[Fre82]. perturbed [CM92]. Peru [CR106, CLSM17]. PH.D [Her02b]. PhD
[Ger10]. phenomena [Art97, ZS15]. phenomenes [Art97].
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Recognising [Bur02b]. Recommendations [Wat00, Ano68a, Ano71b, LLW07]. reconceived [LS11]. reconceptualization [RT09]. Reconciling [Eng03, Bur02b].


relé [Bal88, Rob86]. referer [TV81]. referenced [MO94]. References [Kem81]. referent [Lee17]. References [MM00].


rectangles [Son13]. rectangular [BHLH85]. recursion [Kil85]. Recursive [Sen98].


recorder [Fie87]. rectangle [TP15, Yim10]. rectangles [Son13]. rectangular [BHLH85]. recursion [Kil85]. Recursive [Sen98].

rectangles [Son13]. rectangular [BHLH85]. recursion [Kil85]. Recursive [Sen98].

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reflections [AV76]. Reform [IE07, MG00a, Sen98, Ban11, Bra11, BP80, BSF96, CP10, D’A91, Del69b, Goo07, How73a, How73b, Lun12, MRC18, SS10, Swe77]. reforming [SW92].

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schematization [GP17]. scheme [Sim15, Sty11]. Schemes [Riv07, HN96, HP03, Hein86, Kid08, MPZ16, NH94, RL13, SL95, Ste83].

Scholastic [BHX97]. School [AR07, Ass05, Baz01, Dah04, DVJ98, Dou99, Eng06, EMT06, FPM69, GS08, HZ05, Jur06, Lev71, Lit00, Mes04, Miy00, Pre88, Prz05, SK07, SPFGF14, Sty07, STM06, Tie02, War06, Wat01, AI12, Arm69, AG02, Bal71, Bar03, BNP97, Baz90, BJ82, BZ88, BZA01, BD72, Best12, Bla85, Boa93, Bra14, Bur80a, Bus96, BBFG99, Cas69b, CDGG76, Cha18, Cha93, Clai2, Cra12, DP92, DS02, DVJ02, Dow96, Ehl13, Eng71, FJC95, FK1A15, Fre74b, GC90b, Gla76a, Goo07, Gui17, Gut92, Hah14, Han12a, HS13a, Hay87, Her02a, Her11, HMMG18, HII71, HHDG16, Hol81, HC14, Hoz81, JK17, JGR14, JS01, Kap76, Kap70, Kar02, KK12, Kei71, KL82, Kle71, Kom16, Kom17, Kiie11, LS70, LM11, LLW07, Leu87, Lun12, Ma96, MvdKM13, Mal93]. school
[MK91, Mar69, MG00b, MDPW96, MY84, MRC18, Nim75, Par91, Pop88, Pre92b, Pro70, RL13, Roy81, RDH09, Saj03, ST08, Ste13, Ste68, Sty11, SW14, Thw69, Tie00, Tou86, Tre91, TP15, VS13, Var76, Whi87, Wil16a, WS18, XH88, Yan11, ZER17, vdHPKR13, Lib71]. school-type [Mal93].
schoolbooks [Bar07]. schooled [TDGV09]. schoolers [DH90]. Schooling [Nol16, Che88, Cla85, Led92]. Schools [BBEG05, HBH07, Baz88, Cd04, Dav71, Fid85, For69, Gen70, Ham68, Kar10, LR81, Lyn68, Mal93, Miy17, NCMO15, Str08, Tay91]. Schoolteacher [PM15]. Schubring [Law16]. Schwarz [Rad11, Web18a, Web18b]. Science [Kry69a, RD92, Ano81b, BP80, LMCG08, Wit95, Han98]. sciences [Bag10, Feh69, Kry69a, MUR93]. scientific [HGM15, JSV75, MPS12]. score [WBM+14]. Scores [Lie90]. scream [LM11]. sea [Fre71]. séances [PRR08]. Search [Leu01, Str84, Str85, Vol86, Zev06, ARHS14, Kon72, Lle12, Sim96]. searching [Fit15b]. Second [All85, CWYP92, Daw83, Has97, Jon82, PRR08, Rev72, Rob90]. second-grade [CWYP92]. secondaire [Aud83, BD72, Cas69c, Cas69b, CGGGG74, VD78, VD79]. secondaires [FBM71]. Secondary [Bes07, CGGGG74, Cor17, DVJ98, Miy00, PBR+04, Prz05, Wat05, Ano69, Aud83, BNPG97, BD72, BN77, Boo81, Cas69c, Cas69b, Che89, Cla85, CB17a, CB17b, DVJV02, FBM71, FT03, Fra96, Gal82, Gen70, Gue08, Gui17, Han12a, Her11, HC14, KPH10, Kae88, Kar10, KL81, Kom17, Kiic81, LR81, Leu87, Mal93, MK91, MG00b, Miy17, MLK16a, MLK16b, Or171, PB09, Rev72, Rie13, RDH09, Saj03, ST08, Ste68, SG98b, Tou90, VV15, VD78, VD79, Vii71, VR90, WH15a, WH15b, Wil16a, XH88, vSBvR00]. secondary-education [Aud83]. secondary-school [RDH09]. Secondary-to-tertiary [Cor17]. Sectional [EJDT06]. sections [Ano84c]. seduction [BH11, Wag12]. see [GL10, HH11, LaC14, PAW15]. Seeing [Han12b, MP84, Par88]. Seeking [Ely10, MS14]. seems [ZG01]. seen [KHRK15]. Seizing [Zas05]. selected [Jur77, TF95]. selecting [LH18, MJ15]. Selection [Kis86]. Self [Fri07, HC95, Mal06, PBY03, BS15, BAZF04, HGM15, KMT14, KR09, Plu79, Rel96, SLP+12, Sol12, T94, TTL+13, Wit69]. self-assessment [BAZF04, T94]. self-checking [Ph79]. self-concept [Rel96]. self-efficacy [SLP+12, TTL+13]. Self-Knowledge [Fri07]. self-reflection [HGM15]. Self-Regulated [PBY03, KR09]. Self-Regulation [Mal06]. self-reliant [Wis06]. sellers [Hah99]. selling [TB09]. Semantic [BEW99, Nar00, SW95, WA04, Min83, NK77, NGR82, WB11]. semio [Ior17, Ior18]. semio-cognitive [Ior17, Ior18]. Semiotic [AS11, BH05, ERn06, GBR05, Hof06, Ong06, Ott06, SLP06, Sch13, Win03, APRS09, FLM07, Fri11, MWVE09, MK14, Rad00, San11, See11, SZP10, GFWL11]. Semiotics [Mor06, Pre06, Ott11, PR08, Sch11a, TR11]. Senegal [VD79, VD79]. Sense [MM00, PK17, Sel00, WG07, Bar96, CPPT+13, FC12, JTP94, LL99, Mool13, Pal08, RFP14, Sch16, SM17, Sim96, Sla98, WD10, Wak14]. Sensitivity
Sensuous [RP07, Rad09]. SEO [MA09]. separate [Joh15].

September [Ano74b, Van93b]. Sequence [MD01, Prz05, BC92, Roh08, BC92].

Separation [Van74]. Set [Bag06, Kap76, Mon72, Ber08, CZ11, FB98, Hod96, TLM07]. Set-theory [Kap76, Mon72]. Sets [Ham06, Tsa99, WM98, DeB97, Fre69e, Ott03, Tsa01].

Sequence [AS05, AS04, Car10, DL14, GMNB18, Mar13, MPGDA12].

Sequential [AWL15]. Series [AS05, AS04, Car10, DL14, GMNB18, Mar13, MPGDA12].

Setting [Nil07, WK04]. settings [Cra12, Fra13, KM18, WR96].

Seven [Mat83]. Seventh [Alb00, PBY03]. Seventy [How84]. Sex [And89, Cle79, Kae88, Led85, CWT12, Eli85, FP85, Mal93].

Sex-related [And89, Led85, Eli85, FP85]. Schild [HJ12, Wal17, Winn1]. Shanghai [WqWLR18]. shape [KZ16, Vol77]. shapes [Tri95, VO17, WE95].

Shaping [Sid05, ETC14, GC90b, HS14]. shared [TDEM13]. Sharon [Fit11, Lev13].

Shedding [GM08]. Shifting [AVM15]. Shifts [NP86, PT09, SPS17]. Short [HbL05, Kae94, Wi05, LC13]. shortcut [TDGV09]. shortest [Pat85].

Should [Gra99, Kry88b]. Shu [Sin93]. Sides [Tsa07, Sfa91].

Sierra [Wil78a]. Sign [Ste06, Ber04, Gro77]. signe [Gro77]. signed [NM98]. Significance [Pre06, HEWC10, ZZ11].

Signification [Sam85, Wal73a]. Signifying [Bro08b, PR08, RSS11, YS12]. Signs [Fri11, Rad00, lor17].

Silence [Sie04]. simcalc [SG80]. Similar [DVM98, Ham08, KV75, KAJHB10, Son13]. similarité [GT95]. Similarities [WL90]. similarity [GT95, LH18, Vol77].

simple [Dub84, Fro99, Gra91, Jan74, Jer70, vLXD18]. simples [Dub84]. simplicity [Bar07].

Simplification [Gri83]. Simplifying [TER98]. simulating [ZP91].

Simulation [AP75, ZP91]. simultaneity [EVR16]. since [Bla78, Ehr78, EL 78, Fey78, Fre78c, Fre78d, Gun78, HV78, How78, Kap78, Olu78, Pur78, Rev78, Ros78, Sha78, Wil78a, Wil78b].

Sinclair [Art15a, Fer15, HSNHHE15]. Singapore [FZ07]. Singaporean [JHC14].

Single [Mos05, CWT12, PDT+12]. single-digit [PDT+12]. single-sex [CWT12]. site [BS15].

Situated [Jur06, Tic12, KBK+17a, KBK+17b]. situatedness [NEM99].

Situating [NBHK07]. Situation [Bri05, Cop98, Fli05, NHN03, Bra68, Kun12, LH18, LD88, Mes89, MW09].

situation-specific [Kun12]. situational [Fra96].

Situations [AM97, BG05, HPG05, LPG05, Ste05, ABM92, Bal87, Bel76, Bra13, CYW92, DeB97, Gal11, Jan81, Lec92, NT01, Pre88, Sch13, TSV82, Tre83, Vog13]. Situative [PBR+04]. Six [Car99, Dié70, Jor77, Mat83, Sin00, Urb93].

Six-years-old [Urb93]. sixième [CGS76, For69].

Sixth [CRL06, CGS76, For69]. JHC14. LH71. sixth-grade [JHC14]. size [BFG84]. skepticism [Bro14b]. sketches [Sin03]. skill [Ste82, WE95]. skills
[Bro10a, DT08, Ern86, Ham68, Hee85, HHDG16, JSV75, LDM92, TJ94]. sky
[Ano84c]. Slope [WG07, CN16, MRCR11, Zah15, ZSL02]. sloppy [ZSL02].
Small [Kle01, BHLH85, GGR02, Sha77, TS18]. small-group [Sha77, TS18].
so-called [Ban80]. Social [BC05, CF00a, Bat06, GdA09, Har09b, Kol18,
Mor06, Mor14a, MHD94, Av08, AC95, Ban92, Hoy01, JGR14, Lan13, LW94,
MK14, No12, PV14, Rad03, See11, SJ12, St91, TB09, All99].
social/institutional [AV08]. sociale [TB09]. social [BC05, CF00a, Gat06, GdA09, Har09b, Kol18,
Mor06, Mor14a, MHD94, Av08, AC95, Ban92, Hoy01, JGR14, Lan13, LW94,
MK14, No12, PV14, Rad03, See11, SJ12, St91, TB09, All99].
Socialist [How80]. Socially [GGR02]. Societal [Lin88]. Society [Rog85, Kae89, Kae90, Tay91, TE14].
Socio [IB05, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90, KF90].
Socio-constructive [TJ94]. Socio-Constructivist [ODV06].
socio-cultural [dA00]. Socio-Economic [IB05, Kae90]. socio-personal [MK91].
Sociocultural [KFS01, Ler01, JP09]. Sociological [PA14, Dow96].
sociology [Wil12]. Sociomathematical [SG14, HS99].
Somatic [BR06]. Somatic [BR06]. Some [AG83, Bag06, Br06, Bur02a, Bur05,
DRR02, DWMB05b, DWMB05a, Egs70, FA03, GB14, Gri78, HR74, HS99,
Jech71, Leu05, Min83, O’B70, Sin03, Str78, Str84, Str85, STOM0, TS93, Ust74,
Vol69, Er 86, Lor82, MK91, Mon00, Pol68, PD79, Add72, AV76, Del68,
Del69a, Hof06, KC73, Mar69, PF11, TLM07, Van69b, WD78]. sondage [Bui76].
Source [Lab00, Fre69d]. sources [AI07, Bon13, ET95].
soustraction [AL00]. soustraire [Dem93]. South [Ano16c, Ad88, Ban11, HMG16, Nkh02, SA00, IRA16].
Soviet [Fre74b]. Speak [Bal88, CZ11, FCN14, KC09, LH71, MRCR11, Pap71, Par88, Par91,
RJ11, ST10, TDEM13]. speaks [Ban11, Gla69, GM08, Le92, NT01, YTD11].
Spanish [BBEG05, VMN11]. Spanish-speaking [VMN11]. Spatial
[Bis80, LC81, BCLH89, BH11, BDS+17, PC10, SMW11]. speaker [Pla14].
speaking [VMN11]. Specific
[Hof06, NBD+04, PVdHPR12, Rod06, AP01, Bro08b, PR08]. Specific
[BHX97, DGA05, Kun12, SLP+12]. Spécificité [BC92]. Specificity [BC92].
speech [Kem81, MB09]. speed [JHC14]. Spontaneous
FKC17, FE09, FA03, Gan92, GLZBZ15, Ger10, GMNB18, GMHG09, Guc16, Gan92, GLZBZ15, Ger10, GMNB18, GMHG09, Guc16

student [GS18, HOS13, HBZE98, HS13b, HM13, HHDG16, HMA13, HMT13, JHC14, JM18, JE14, KPH10, KP10, KK12, KPS17, KB11, Kor03, KSL11, KR11, Led87b, LK16, Lev10, Lev13, LC15, Mal93, MWSS17, MF17, Mar13, MSASGG16, MPdP17, MMP15, Mev83, MK97, MW09, NH15, Ola14, PP12, Par91, PvdHPR12, PT09, PAW15, PMG+94, PR08, QM94, Rad00, RW11a, RW11b, RSL17, RR91, Roh10, RDH10, RC94, Saj03, SJ17, SLP+12, SKR15, Son13, Son16, SSP04, Sty11, SLW83, TA08, Tch11, TT07, TS99, Tru15, TO13, Tzu07, VS13, VP13, VR90, Wal10, WAL18, WSR11, Way94, WM09, WS18, YM16, vds11, vdHPKR13, GT95, LX16]. student-centredness [Wal10]. student-teachers [HMA13]. Students [BCFF98, BH95, CBF07, Car99, Cla07, CRL06, GL98, GBR05, GPW05, II05, Jur06, MM00, STM06, WB11, Wat01, Wai91, Bli03, BLP10, Bon14, BJ13, BSF96, Bro08h, Cla86, Cla92, CBSP12, CSM17, DW17, DeB97, Dem93, Dom11, DKL14, DS17, Ell13, Eng12, ET95, FV13, FJC95, Fra13, Fra96, GdA09, Gro77, Hah14, HC95, Her02b, Hew12, HP03, Kae93, Kae94, Kar10, Kis86, Kon72, LBT07, LMC08, LG16, LLD14, Ma96, MK91, MG00b, ME13, Min83, MY84, MRC18, MA09, Nil07, Nkh02, O'B73, RO09, Rob86, Rue13, Sam85, SL74, STGT14, Sie87, SBP11, SL95, SS93a, Sin00, SG98b, TJ94, TLM07, Tur80, WZ96, Wal12, YM16, vdHP13, FPS16]. Studien [Dam87]. Studies [Ano02c, Kae94, LPG05, Pea76, Add72, And09, CV09, DB86b, Fit15a, Kol16, Kol81, Prz04, Rob90, Sfa15, Dam87]. Study [Ano98i, Ano04d, Ass05, BT05, Blu02, CPP07, Cre06, Dou99, DS05, DGA05, EJDT06, EH06, GL00, Hlb95, JS99, LD88, Mos04, RD92, Sem70, Sid05, SS06, Spe95, THS06, War06, Wat05, WI01, WMM13, Ale81, Ano14b, BGW+14, BGW+16, Bal80, Bal71, Baz90, Bel76, Bz01, BC78, Bla85, BAZF04, Buc87, Car10, Cha18, Cob86, Cor17, DVJ02, FQL+17, Fra96, FC12, GD17, Gla82, GCG+92, GKT1, HN90, IS90, IS90, Jan10, KM93, Kar10, KT01, Lam15, LCD90, Led87b, MvdKM13, MCV13, MR14, MRR94, O'C01, Par16, PA14, Pet91, PMG+94, Pop84, RLC13, Roh10, RT14, RIA17, Ri13, RDH09, Saj03, SGTK14, SS91, Sin03, TF95, Tro00, TJH11, WWV13, VNM11, VO17, WK04, WMR11, WM09, Wri94, ZS15, dA00, Ano00d, Ano14b]. Study [FvM97, Leu05]. Studying [HP08, Ler01, RMA98, Gof77, VA18, MCR11]. style [Chr00, Kae90]. styles [CPPT+13, Hmt10, Isa87, PPC09]. Suad [SJS12]. Suan [Siu93]. Subject [Eve90, ET95, BN96, BS94, Pa16, Ro12, TH13]. Subject-matter [ET95]. Subjectivity [Bro12, Bro08a, BH11, PR08]. subjects [Beh68, BN91, BF96]. subsequent [SDBM69]. Subspace [WSR11]. substance [Nar16]. Subtest [BHX97]. subtract [Dem93]. Subtracting [Str82]. Subtraction [FZ05, Sel01, Tho90, AL00, CHM83, Mat81, Mat83, NK77, NGR82, PvdHPR12, PDT+12, SPHN12, Son16, VM13, Ves69]. subtractions [PDT+12]. Success [Car99, MA09, Sel01, Bur87, CL84, Gli91, KK13, Led80, Nkh02, SJS12]. Successful [Car99, Dah04, Bon14, Nkh02]. successfully [LLD14].
successive [Noe80b]. such [Tsa01]. Sudan [El 78, PSE87]. sum [Tab13].
summer [Str08]. Summing [Rut10]. SungWon [MPS12]. Sunshadows
[Dou99]. superfluous [GSH16a, GSH16b, Lin90]. Supervised [Cop98].
supervision [FE09]. Supervisors [GPW05]. Support
[HBH07, Kap01, MO94, BA14, CSS+14, RIA17, RH02, Vla02, WC08].
supported [RDH09, SS15, vdHPKR13]. Supporting [LLD14, MC01].
supports [Woo16]. supposer [YC90]. suppression [WHE08]. surface
[DPG89]. Surveille [Cop98]. surveilling [Sko12]. survey
[BGSW94, Bui76, Fey89, FB02, GB01, MRW14]. surveys [Del68, TE14].
Susanne [Bak16]. Swapna [Bak16]. Swedish [Han10]. Sweep [Vog70].
Switch [Gil71]. Switzerland [SS93b]. Sydney [Wat05]. syllabuses [Hol81].
Symbol [SLW98, BP80, Kie81]. Symbolic
[NHH97, Sko12, Bos87, DF15, Rob75, Rut90, SSP04, TA08, ZWMR16].
symbolique [Bos87]. symboliques [Tro00]. Symbolising [Pai15].
symbolism [CMdR18, CB17a, CB17b, HR74, KT15]. symbols
[Hie88, Wea90]. symmetric [Hah75]. symmetrie [Coo92, Ros69].
symposium [Ano74b]. Synergies [MCVM13]. Syntactic
[WA04, SK13]. Syntax [RP07]. Synthese [Han98]. System
[Van74, Bro10a, Dub84, Gen70, HOEF89, KRHD15, Sfa15, SS93b].
system-wide [Bro10a]. Systematic
[Eng68]. systématique [Dub84].
systeme [Ott76]. systemic
[Wit01, ZCPP13]. Systems
[Gat06, CV09, Die71, GMHG09, GT09, MWVE09, PXTW17, SK69].

T [Fit15b]. table [Lan86a]. Tableur [CB89]. Tacit [Fis01, Kid11]. TAI
[TA08]. tails [LLHL13]. Taiwan [YC95]. take [Sca75]. taken [Kon18].
Taking [SPNH12, ALO+91]. tale [Gri87]. talented
[Ell86, Kis86, Lar86, SGTK14]. tales [GM10]. Talk
[Cre06, Edw09, LK16, Row95]. Tall [Bye15, KH80]. Tamàs [Kry88a].
tangents [Hir72]. Tanzania [Phy71]. Tao [Cle84]. tape [Fie87]. Task
[Chr97, KK13, MM00, AGP15, Bro08a, FB16, KH07, LL13, SLP+12, SMW11,
SS88, TTTL10]. task-based [KH07, LL13]. task-specific [SLP+12]. Tasks
[Doc06, HI05, Lit00, MDD04, BL010, Cle80, EJ13, FI17, Fos18, HC82,
HKG89, JE14, KSL11, Kra93, KMA02, LWW07, LMC04, LG10, LLD14,
PFP14, SMW11, SV13, TTM+13, VV15, Vol77, VwdHP15]. Taught
[Mur04, Egs70, Miy17, MCR18]. tau [Sch92]. Taxonomy [EH05a, Ola14].
Taylor [Mar13]. Teach
[Moy01, Nic98, NC06, PBR+04, Ano76d, Cd04, Fre68, LG14a, LC15, Par15b,
Par15a, Pol69, RDH09, Ser68, Sim94, Swe95, Van76]. Teacher
[ABBK+05, AR07, ABM92, AAT99, BBEG05, Bes07, Bes12, CWL07, CP10,
CEMP04, CSS+14, Coo99, Cre06, CLSM17, DEM04, DK15, EJ13, FPCL90,
FI17, Fre77a, Fur07, GSE07, Gat06, GS18, HD07, HMT13, IER07, Ior18,
LE09, Law00, Led87b, Llo06, MCB05, MMBD05, PKP+18, PC98, PMG+94,
RR05, Sen98, SSM+05, Spe09, Tie02, T9R18, Tsa07, Wal10, WG07,
WHC09, ZS07, dPQ16, dF12, AV08, AH00, And90, Art15a, Ayd90, BN96,
Bek10, BCFC90, Bju04, BHN10, BF96, BR17, BC12, CEHM16, CRPPRG16, CPK08, CPP09, Cre03, DC92, Dam87, DR13, DDB +10, Eli13, ET95, Eve99, Fau15, Gel98, Gel08, Gof77, GMNB18, Goo07, Gra04, GB17, Gui17, Gut92, Har09b, HM13, HMMG18, HK99, Hoy07, IWF +15, JN15, Jan09b, KHP10].

teacher [KPH10, KZ94, Kle12, KR09, KR11, LC16, Lec17, LLW07, Lex14, LYHC18, Lou18, LC14b, LC18, MvdKM13, Mal93, MM11, MPdP17, McQ86, MPZ16, MLK16a, MLK16b, MN95, NBD12, Nol12, OK13, Osl12, PSH +18, PPP14, PA14, PXTW17, PBO9, Pbo8, RL00, Rut10, RNM12, SG14, Sct71, SGTK14, SZP10, Shr10, SS91, SS93a, Sim94, Sol16, Tch11, Tha10, Tho84, TH13, TgS9, Var76, Was15, WL90, YH +15, Yan11, YM16, ZZ11, ZZ08].

Teacher-centredness [Wal10].

Teacher-education [Ell13].

Teacher-student [HMT13, LC16].

Teachers [Ano04d, DS06, Gra99, HS13b, Kry69a, LG13, kSL13, Men07, Moy01, Nic02, NC06, Pre06, Sko04, Tsa99, Wat00, Wat05, XM17, Ale81, Ban11, BH94, Bon14, BSF96, Bro08b, CDW14, CW14a, Cla12, CSS +14, Cor17, DS02, Del69b, Del69a, Dra14, EK10, FE09, FJC95, Fra96, Fre69e, Gal11, Gal82, Gen70, Gli91, Gri68, GT09, HOS13, HBZ98, HHDG16, HMA13, How75, Jan09b, KBK +17a, KBK +17b, KL82, KH07, KZ16, MHH90, Mur93, Mur95, Nol16, O'B77, PRR08, PGM13, Phe10, Rei96, Rie13, SB97, Son13, TS18, Tio00, TDEM13, VD79, WKB97, dF04, dF12].

Teaching [AP07, ACJO04, Als02, Ano74b, Ano98i, AS05, Bag73, Blo03, Cas98, CWL07, Cha97, Chr00, Cla02, Cli17, DS06, Doe06, EH05a, EH05b, GP01, HP05, HB07, Hl05, Jaw02, Jaw03, KB07, Kle02, LP05, Ler01, MMBD05, MR17, NBE +12, PBY03, PGM13, PM97, SLP +12, Sed69, Sel98, SGTK14, SBP11, Ste05, TER98, Tio99, Tsa99, Tsa02, Uhl02, Uhl03, Ves76, VM78, WD05, Wit84, AV08, All85, AH00, ARHS14, Ano68a, Ano68c, AV76, BS12, Bat13, Bei68, Bei93b, Bei93c, BC92, BS80, BN77, BR78, Bur80a, Bur02a, Bur80b, Cas77, Cj75, Cha18, CW14a, CPK08, DB86b, ID95, DRR02, EVR16, Elb03, Eng68, Ern85, Eve90, EK10, Fm97, Fie79, FG84, Fle71, FBA10, For69, Fr67b, Fr69, FC12, FCN14, FM14, GP09, Gan92].

teaching [GBMB70, GMNB18, GFJ13, Gla87, Gb13, GSH16a, GSH16b, Hah75, Han10, HOEF89, Hof77, HK99, Hug74, Ior17, Isa87, Jak71, JP09, Jon16, Jou13, Kla68, Kry69b, Lbo00, Law00, Lib77, Lun77, Mar69, Mas69, Mat03, MG12, Mog17, Mso13, MRSP14, NCMO15, Ott13, Os12, Pas78, PXTW17, Pim90, Pol68, Pro69, RSS11, RL00, Rei96, RK17, Rev68, Rog71, Rout68, Rout08, Roy18, RH02, RNM12, Sar02, Sh71, Sed76, Siw73, SHAC01, Ste91, Ste97, SK69, Sto71, SPR17, Str03, Sut03, TN16, Tch14, Tsv82, Tho84, Tri95, Ush74, VrP +12, Vn76, Vl71, Vin75, Vol69, Vol76, Wai70, WB +14, Wai73b, Wai17, Wal76, WqWLR18, WH15a, WH15b, WL90, Wit69, Wit81, ZZ11, Han12a, Pis68].

Teaching/learning [Cl02].

Teasing [Han12c].

Technical [Ano02d, Ano02e, Ano02f, Ano03c, Ano03d, Ano04f, Ano04g, SS05b, Ern16b, RNP13].

technique [Wai70].

Techniques [MDD04, bL00, Lev81, PSH +18, Wal70].

techno [Gai11].

techno-mathematical [Gai11].

Technological
[Baz01, MM03, Bis79b, TP10]. **Technologies**

[EH05a, HbL05, Jou13, KL14a, Wal12]. **Technologizing** [Zev04].

**Technology** [Fey89, GH98, Jah83, SK98, Wil05, BscCdA18, BR17, Bur90, CEMH16, DDB+10, FT00, HSZ17, bL00, LE09, MCVM13, PB09, RDH09, Sko88, Sta11, Str87]. technology-rich [DDB+10]. technology-supported [RDH09].


[Ad89, CB17a, Cor17, CB17b, Gue08, MG12]. tessellation [Har74]. Test [BHX97, HH78, KV75, Mau85, Ola14, Wal73a, Kon72]. tested [Bro10a]. Testing [Hec78, And79, DT08, HYC+97, VH16, Gau69]. Tests [Coo98, WW02, And89, CF00b, Durn82]. Text [NHN03, Kry69b, Mor14].

Textbook [MG12, DL14, Lit03, Par16, Sun11, Tur80]. Textbooks [Mes04, NN07, NC06, Aha12, DF15, FZ07, HC14, SD13, SV09, WW11, WvdHPD15], texte [Kry69b]. textes [Rut02]. Texts [Ost06, Bra11, Dow96, Kon93, Wag12]. Thailand [Pur78].

Their [Cla07, HD07, Jou00, LW99, AS04, AS05, Bes12, Bju04, BWHM+10, Cha93, DEMW06, FV13, FYAE12, Fra13, FA03, HH11, HM13, JM18, Kar02, Kra02, LBT07, LJW13, LK16, Lin88, MY84, Nkh02, NBE+12, PXTW17, Phe10, PC10, Roh08, ST02, SGTK14, Sol06, Sun11, TTT+13, Tsa07, TDEM13, VP13, VD78, WT14, Wei91, WM09, WS18, YM16, Zev11]. Them [HDM07, Pol76]. Thema [Wal76]. theme [Chr00]. theme-based [Chr00]. themes [Jou13]. Theorem [MRSP14, Gri13, Tho94b]. théorèmes [Pas78]. Theorems [GB17, Dav93, Pas78]. theoretic [AS11, RL04, SJ04].

Theoretical [CPP07, Eli85, Jaw03, LPG05, AM14, BWD10, BBFG99, Cha18, KL14, MCVM13, MTBR16, Sim17, Str93a, Vou16]. Theories [Ely10, Bak16, BGT17, GBE13, Kid16, LXT02]. theorizing [dFS12].

Theory [Bag96, BSW16, DDLZ97, GD17, HPG05, Nar00, Spe05, Tsa02, Web18a, Weib18b, Bas17, Bas02, BW12, BTvG+17, Bur96, BB03, DDLZ94, Eng03, ES03, Fis93, HEWJ+15, Hie88, Hol81, JP09, Kap76, Kap77, Kei82, Lan13, LIW07, LYHC18, Mai85, McQ86, Mon72, Mor14a, Nmn75, Nol12, Num96, PV14, Pro13, Rot12, SB12, Str84, Sty85, Sut93, TR11, VA18, Ves76, WB11, WW11, WH15a, WH15b, Wil09, Zaz99]. theory-based [LLW07].

Theory-building [Bas17]. Therapy [Wil97]. There [Sfa01, ST08]. these [MDPW96]. thesis [Dar82, Sch83]. think [Bye15, ZG01]. Thinking [Ano72a, De 94, Doe06, EJDT06, IE07, Lan86a, MM03, PBY03, RP07, SZP10, ZMP07, Bar09, BBG+17, BBFG99, CPPC18, DS17, GP90, GLZBZ15, Ger88a, GPPT99, Gre01, Gre12, HS13b, HSZ17, JLM97, KAJHB10, Kru13a, Kuy93, LH09, MvdKM13, MH97, OSRT1, O'B72, O'B73, PC10, Rad00, RSS11, Sfa01, Sj04, Sat89, TT91, Tav68, TW09, Van69b, Vo86, WC08, Wit69, Wit81, ZCYP13, ZL02, vO10, Win11]. Thinking-Aloud [ZS07]. thinking-language [OSRT1]. Third [Gre17, SLW98, BR78, CBSP12].
third-grade
[CSKP12, CSK12, VD79]. Thirteenth [GL00]. Those [Cd04, Bat13, HH11]. thirds

Those [Cd04, Bat13, HH11]. Thirds

Thirds

thought
[Alb00, Vin97, Car93, For90, GE98, LLD14, MS09, Sla98, Van76]. Thoughts
[Fre93, PF11, Str84, Str85]. Three

Three

Three-digit
MTBR16, MRRF94, NH94, Pla14, SPNH12, Sin00, SHAC01, TSV82, TMP10, TTL+17, VMIN11, Wai70, WM98, WK04, WT14, WHC09. **two-column** [Her02a, WHC09]. **two-step** [NH94]. **two-variable** [TMP10, WT14].

**two-year** [WK04]. **type** [Dum82, Mal93, RSL17]. **Types** [Cla83, Gli91, PC10, BLP10, Bro10a, CK15, SC93, TSV82].

u [Dam87]. **U.S.** [CDW14, SLC95]. **U.S.A.** [Fey78]. Uhlig [Bur02a, DRR02].

**Uncontrollable** [ASP97]. **unconventional** [AL00]. **Undergraduate** [EH05a, EH05b, HB69, Hir81, MsdSGG16, Nar00, SSP04, LZ08, LG16, MRFW+12, RW11a, RW11b, Vin77]. **undergraduates** [And09]. **underlies** [Sch16]. **underserved** [Bon14]. **Understand** [SS06, HBZE98, HS13b, JGR14, Kap09b, Kra02, Ram03, Van77, Wal12].

**Understanding** [BDS+17, CWL07, DB86a, DB86b, Gre01, Kil01, MD01, MN95, Mor14b, OPC+98, Sha98, SJS12, SS93b, Sin00, TY04, Tir99, Wat07, WW11, Zas98, Ang89, BHHS09, BJ82, BE85, CRPPRG16, Cla12, CR09, Cra12, DC92, DR13, Eke77, FPS16, Fra13, GFWL11, GT00, HS13a, HS14, HMA13, Jou13, KPH09, KC12, Law00, LCD90, Lin88, Lle12, MS97, MT15, MPG12, McC14, MFJ17, Ort83a, Ort83b, PXTW17, PS88, PK94, Pla18, PLW81, Roh08, Roh10, RT14, Saj03, Sla82, SSP04, Tho94b, Tzu07, Vol77, WAL18, WJW11, Zah15, Zep82].

**understandings** [CPP07, ZC06, Go103, HBZE98, HK02, YTD11].

**unexpected** [SBDM69]. **unfamiliar** [RL04]. **unidirectional** [JM18].

**unified** [ZER17]. **unifying** [ID95]. **union** [DeB97]. **Unit** [Bus05, CBSS96, CS94, Ern06b, MLK16a, MLK16b]. **United** [Law00, MNRR95, YC95]. **units** [Lee17, WR96, Wit84]. **unity** [FG17].

**universal** [Add93, CGGGG79a]. **Universals** [Add93]. **universelle** [lD95]. **union** [DeB97].

**University** [Ano98i, Ano16b, Ano16c, GB05, How75, Jaw02, Kae93, Kae94, Sfa15, TO13, bMYT08, BZ01, GS76, GB14, GM84a, GM84b, HYC+97, Jin07, Lit03, MK91, Mur93, Mur95, Nar16, Prz04, SLW83, TLM07, VCS95, dPH13, IRA16].

**unknown** [LH96, Vla02]. **unknowns** [HL16]. **Unpacking** [Lle12, SS95, Was15, GBC12]. **Unravelling** [Hop85]. **unsuccessful** [FM09].

**Unterricht** [Beh68]. **upon** [SD95]. **upper** [Eng71, FT03, KPH10, VR90].

**upper-secondary** [FT03]. **uptake** [Kle12]. **USA** [Ala12, SS10, VS13].

Usage [Rut05, WN04, Abe78, Dem93, Gla68]. **usages** [Tro04]. **Use** [Cla07, Dah04, Jan81, Mor00, Mos04, Moy01, Mur04, NC06, Wat05, Wil12, AI08, Art97, Ber04, BL10, BJ13, CN16, CB17b, DF15, DVJ02, DS17, Dra14, Eng68, FKC17, Frc99, Gal86, Gla68, GK71, GB01, GSH16a, GSH16b, Gut07, HS13b, JM18, Kle71, LLW07, Lev10, LYHIC18, MWSS17, MeQ86, Mos98, Or171, Pai13, PvdHPR12, PDT+12, Pic71, PB09, PN19, RRP91, Row08, Rut90, RH02, TPHS07, TDGV09, Van03b, VO17, Wal68, Wil16a, Yan12, YE16, Dem93, CB17a]. **use-value** [Pai13]. **Used**
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viewing

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vitality

vocabulary

vocational

voice

Voices

Volume

Vocabulary

vocational
Ano03g, Ano04h, Ano06a. voting [Ste76]. vs [KZ16, LH09, Par88, Sle82]. Vygotskian [Cra96, RR17, Wil16b]. Vygotsky [Bar16].


[FM09, GG96, PAW15, TS99]. Ways [Coo99, Fre79b, Cor17, NT01, Nil07]. weird [ZG01]. Welsh [Eva07]. Welsh-Medium [Eva07]. Wenzelburger [Ste94]. were [Bek10]. West [Ano74b, Wil78b]. Western [Sfa15]. Where [AAB03, BSV95, Her02b, Nar16, NN97, Ni02, RC02, RC04, SS03, Fit11, Fit14, FT03]. Which [DG03, Nil07]. while [Bek10, BC08]. Whither [PV14]. Who [Mor07, Cd04, HH11, VM78]. Whole [PM97, Ano14b, CRPPRG16, Cha18, Jan09b, KM18, O’70, SZP10, SR92, Son16, Tab13, Tha10, Ves69, Ves71, Wsl83]. whole-body [KM18]. whole-class [Jan09b, SZP10]. why [Jan09a]. wide [Bro10a]. Wie [Van76]. will [Han12c]. William [Gre17]. Wilson [Art15a, Rut05]. window [BDS+17, CR09]. windows [PXTW17]. Wiskobas [Tre93]. wiskunde [Gre17]. wissenschaftlicher [JSV75]. Within [BEW99, MG00a, AGL17, Bat13, BN96, Gra04, LPG05, MA09, RM12, THS06, Tru15, WBF13]. within- [Tru15]. without [BJJ13]. Witwatersrand [Ano16c]. Wolff [MPS12, Bro12]. woman [BW13]. Women [Fen79, Mai85]. Word [Cha06, DV98, Sel00, YG99, Ade90, CHM83, CSH12, GS18, Lan86a, LCD90, Lep90, NK77, Pal08, RO09, SLS74, SW95, VM13, Wha96]. words [FS16, REA09]. Work [As05, Cop98, BA14, Bar87, Cas04, Dra14, Eng76, Fit14, FB17, Gai11, GMN18, HJ12, HMA13, IT77, KR11, LK14b, LK18, PXTW17, Pre03, RNP13, Sty11, TL15, VCS95, YSRU03, YMs16]. work-related [BA14]. workers [Zev11]. Working [Gof93, MB09, MC10, Shr10, Zev04, Boa02, Lun77]. Workplace [MM03, Ni02, WW07a, WW07b, CW14b, FB17, JS01, NBHK07, Rot14, TP10, TP14, Wsl12]. World [Jur06, LH07, Boa93, El 86, Lar86, Sta11, SG98b, Jon16, LX16]. worlds [Bye15]. Worldviews [CW14a]. would [AAB03, RC02, RC04]. Writing [Nte06, SG98a, BR89, CW95, PM00, Rot12, SS15, Way94, PW03]. writing-to-learn [Way94]. Written [FZ05, Pug04, BC08, Cle80, Hie88, RIA17, SS15, SS93b, Tho94a].

XIIIth [Ano72b]. XIIth [Ano71c]. XIth [Ano70]. XIVth [Ano74c]. XIXth [Ano77b]. XVIIIth [Ano77c]. XVIIth [Ano76g]. XVth [Ano76h]. XVth [Ano74d]. XXth [Ano78d].

Yackel [HJ12]. Year [De 94, Eva07, FB02, SS93b, BZ08, BZ01, Dem93, Dem97, DB86a, DB86b, Kie01, LH18, Mat83, Rou68, Tru15, WC08, WK04, Wea90, Wri94]. Year-olds [SS93b]. Years [IE07, VL04, Ano00h, AV76, Bic82, Bui76, How84,
Kru13a, Sfa13, Tak18, Urb93, Wal12]. **Young** [Hes13]. **Yeeping** [Hes13]. **Young** [Bri06, CN00, Eng91, Hew12, JS99, Mak14, Mon01, Tho94a, VS79, Zev11, Ang89, Bur80b, Cob87, CSK12, FFL80, JLTM97, KLBMK+13, MS14, TTL+13, Tur80, VO17, Vou12, vO13], **younger** [Fie79]. **Yvette** [Bro11].

Z [ZG01]. **Zahlbegriff** [JSV75]. **Zambia** [Say94]. **Zankov** [Ott76]. **Zazkis** [Tsa02]. **Zealand** [IB05]. **zero** [OB11]. **zero-definitions** [OB11]. **Zhang** [Siu93]. **Zilina** [Ano72b]. **Zofia** [Now92]. **zones** [GGR02, HMT13]. **Zooming** [KK10]. **ZPD** [AGL17]. **zum** [Dam87, Wal76]. **zur** [JSV75].

References

**Adam:2003:CRC**


**Artzt:1999:CME**


[Artzt:1999:CME


[Adler:2005:REF


[Adler:2005:REF]
REFERENCES


[AC95] Bill Atweh and Tom Cooper. The construction of gender, social class and mathematics in the classroom. *Educational
Ahmed:2004:HCT


Ahmed:2004:HCT

Artigue:1988:BR


Artigue:1988:BR

Adda:1972:QEP


Adda:1972:QEP

Adda:1975:LMM


Adda:1975:LMM

Adda:1976:DLP

REFERENCES

Adda:1982:LCP

Adda:1987:GE

Adda:1993:LSE

Adetula:1990:LFD

Adedayo:1998:DEG

Adler:1988:NBM
Adler:1997:PIA


Ayalon:2008:DRE


Amit:2005:AAR


Afekenstam:1983:SAC


Assude:2002:DAN

REFERENCES


REFERENCES


REFERENCES


Allen:1999:BRK


Atkins:1991:MR


Alsina:2002:TME


Arsac:1997:SIA


Artigue:2014:NTF


Anderson:1979:OTE

Anderson:1989:SRD


Andrews:2009:CSM


Anghileri:1989:IYC


Anonymous:1968:FRT


Anonymous:1968:PD

REFERENCES


Anonymous:1972:PPL


Anonymous:1972:XIO


Anonymous:1974:CRM


Anonymous:1974:ISR


Anonymous:1974:XIOa


Anonymous:1974:XIOb

REFERENCES


REFERENCES


REFERENCES


REFERENCES

Anonymous:1985:Aa


Anonymous:1985:Ab


Anonymous:1985:EA


Anonymous:1986:Aa


Anonymous:1986:Ab


Anonymous:1986:Ac


Anonymous:1986:GE


Anonymous:1988:MEH


Anonymous:1988:PAa


Anonymous:1988:PAb


Anonymous:1989:BR


Anonymous:1989:PN


Anonymous:1990:Aa


Anonymous:1990:Ab

Anonymous:1990:CP


Anonymous:1990:MHF


Anonymous:1991:Aa


Anonymous:1991:Ab


Anonymous:1991:SIC


Anonymous:1992:Ab


Anonymous:1992:Ac

Anonymous:1992:Aa


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Anonymous:1992:PN


Anonymous:1993:A


Anonymous:1993:CP


Anonymous:1994:Aa


Anonymous:1994:Ab

REFERENCES

Anonymous:1994:Ac


Anonymous:1994:Ad


Anonymous:1994:CP


Anonymous:1995:Aa


Anonymous:1995:Ab


Anonymous:1995:Ac


Anonymous:1995:E

REFERENCES


Anonymous:1998:AEF


Anonymous:1998:BRa


Anonymous:1998:BRb


Anonymous:1998:CP


Anonymous:1998:C


Anonymous:1998:Ea

REFERENCES


Anonymous:2000:DDT


Anonymous:2000:E


Anonymous:2000:IAa


Anonymous:2000:IAb


Anonymous:2000:OHY


Anonymous:2000:VCa

REFERENCES


Anonymous:2001:VC

Anonymous:2002:APA

Anonymous:2002:CV

Anonymous:2002:RES

Anonymous:2002:TIAa

Anonymous:2002:TIAb
Anonymous:2002:TIAc


Anonymous:2002:VCa


Anonymous:2002:VCb


Anonymous:2003:APAa


Anonymous:2003:APAb


Anonymous:2003:TIAa

Anonymous:2003:TIAb


Anonymous:2003:VCa


Anonymous:2003:VCb


Anonymous:2003:VCc


Anonymous:2004:APAAa


Anonymous:2004:APAb

Anonymous:2004:AIC


Anonymous:2004:DDF


Anonymous:2004:IA


Anonymous:2004:TIAa


Anonymous:2004:TIAb


Anonymous:2004:VC

Anonymous:2005:APA


Anonymous:2006:CV


Anonymous:2006:IAF


Anonymous:2014:NSF


Anonymous:2014:TTI


Anonymous:2015:CP

Anonymous:2016:CP


Anonymous:2016:FKM


Anonymous:2016:HFM


Anthony:1996:ALC


Anxolabehere:1975:AMM

REFERENCES


REFERENCES


REFERENCES


Bakker:2016:BRN


Balk:1971:AHM


Balache:1980:EAG


Balacheff:1987:PPS


Baldy:1988:EDD

Rene Baldy. De l’espace du dessin à celui de l’objet. Une activité de mises en correspondances entre des dessins en perspective cavalière et des objects réels. (French) [From the space of the drawing to that of the object. An activity of


Barwell:2003:PAI


Barbin:2007:ASE


Barwell:2009:RDC


Barwell:2016:FIM


Bastier:1969:GR


Bass:2017:DOL

REFERENCES


REFERENCES


REFERENCES

Borba:1996:SCT

Buendia:2005:PPA

Brizuela:2008:RPM

Brown:2012:DDA

Ben-Chaim:1990:CTP
REFERENCES


[BDS+17] Catherine D. Bruce, Brent Davis, Nathalie Sinclair, Lynn McGarvey, David Hallowell, Michelle Drefs, Krista Francis, Zachary Hawes, Joan Moss, Joanne Mulligan, Yukari Okamoto, Walter Whiteley, and Geoff Woolcott. Understanding gaps in research networks: using “spatial reasoning” as a window into the importance of networked educational research. *Educational Studies*
REFERENCES


REFERENCES


REFERENCES

Bell:1976:SPP

Bell:1979:LPA

Bell:1985:BR

Bell:1993:GE

Bell:1993:PDT

Bell:1993:SED

Bergeron:1994:MNH
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

[117]


Bishop:1988:MEC

Bishop:1989:E

Bednarz:1982:UNP

Bednarz:1988:CAN

Bouck:2013:ECU

Bjuland:2004:STR
REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Bos87] Françoise Boschet. Fonctions du code symbolique dans le discours mathématique. (French) [Functions of symbolic code in
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Bur02b] Leone Burton. Recognising commonalities and reconciling differences in mathematics education. *Educational Studies*
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Castelnuovo:1969:TA]

[Castelnuovo:1969:LCA]

[Castelnuovo:1977:LMF]

[Castro:1998:TPC]

[Castela:2004:IIM]
REFERENCES


[CBF07] Zhongjun Cao, Alan Bishop, and Helen Forgasz. Perceived parental influence on mathematics learning: A comparison


[CDGG76] Emma Castelnuovo, Daniela, and Claudio Gori-Giorgi. La géométrie projective à l’école. (French) [Projection geometry


REFERENCES

Cantoral:2003:MEV

Castelnuovo:1974:GFE

Castelnuovo:1979:CGU

Castelnuovo:1979:LPF

Comiti:1976:ASC
REFERENCES

Cooper:2002:CR

Chen:2013:IA

Chaye:1971:ADF

Chazan:1993:HSG

Chapman:1997:MTM


REFERENCES


REFERENCES


[Cla85] David Clarke. The impact of secondary schooling and secondary mathematics on student mathematical behaviour. *Educa-
REFERENCES

Clarkson:1992:LMC

Clarkson:2002:TLF

Clarkson:2007:AVS

Clark:2012:HMI

Clements:1979:SDM
REFERENCES


REFERENCES


[CO10] Günhan Caglayan and John Olive. Eighth grade students’ representations of linear equations based on a cups and tiles


REFERENCES


Charalambous:2009:UHM


Chimoni:2018:EEA


Chrysostomou:2013:ENS


Clarke:2009:SFC


Crawford:1985:BR

REFERENCES


[CRPPRG16] Elena Castro-Rodríguez, Demetra Pitta-Pantazi, Luis Rico, and Pedro Gómez. Prospective teachers’ understanding of the multi-


REFERENCES


Chow:2016:TSC


Cobb:1996:MCL


Chan:2014:WRB


Coben:2014:MMD


Cavey:2007:ITM

Laurie O. Cavey, Joy W. Whitenack, and Louann Lovin. Investigating teachers’ mathematics teaching understanding: A case for
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

DeBlock-De:1994:MPM

DeBlois:1997:TED

Deblois:2006:IIP

Dekker:1987:RJT

Delessert:1968:QON
REFERENCES

Delessert:1969:QPT


Delessert:1969:CBR


Demby:1993:LCA


Demby:1997:APU


Dekker:1998:PMI


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

168


REFERENCES


[DR13] Brent Davis and Moshe Renert. Profound understanding of emergent mathematics: broadening the construct of teachers’ disci-

**Drageset:2014:RPF**


**Dreyfus:1993:BR**


**Dreyfus:1995:GE**


**Dreyfus:1999:WJC**


**Dreyfus:2006:MEE**


**Dreyfus:2007:ERA**

REFERENCES


References

172


Downton:2017:PCP


Dogan:2008:ICU


David:2012:RVR


Dubois:1984:SCC


Dumont:1982:LDD

REFERENCES


Dawkins:2017:VNP

Dubinsky:2005:SHIb

Dubinsky:2005:SHIa

Doerr:2000:CMG

Eccles:1985:MSM

Edwards:1984:CEN


REFERENCES

Ehrenfeucht:1978:CME


ElMouhayar:2013:TAI


Empson:2006:FCM


Even:2010:WMD


Ekenstam:1977:CQU

REFERENCES


Engel:1971:GAU


Engel:1975:PA


Engel:1976:WDP


English:1991:YCC


English:1997:DFG


English:1999:BRL


Ernest:1986:CGP


Ernest:1999:FKM


Ernest:2006:SPM


Ernest:2016:PCM


Ernest:2016:UAM


English:1996:ARD

Evans:2003:ICI

Evans:1995:SMK

Evans:2014:MIA

Evans:1999:BBR

Evans:2007:DPI
REFERENCES


[Even:1990:SMK]


[Even:1999:IAP]


[Evdahl:2016:CTS]


[Finegold:1976:EDR]


[Forman:2001:MVM]

REFERENCES


REFERENCES


Fukawa-Connelly:2014:ATA


Fernandez:2009:ESM


Fehr:1969:CMI


Fennema:1979:WGM


Ferrara:2015:BRW

REFERENCES


REFERENCES


REFERENCES


REFERENCES


FitzSimons:2014:CVM


FitzSimons:2015:ESM


FitzSimons:2015:BRM


FitzSimons:2017:BRE


Freudenthal:1986:BR


REFERENCES


REFERENCES

Furinghetti:2014:RCM


Fischbein:1991:FAP


Fort:1969:EEM


Forgasz:1995:GRB


Forster:2000:KTS


Foster:2016:CCM

References

Foster:2018:DMF


Fennema:1985:ALB


Farmaki:2007:EGM


Fennema:1990:TAB


Fischbein:1969:IPE

REFERENCES


REFERENCES

Freudenthal:1969:ADP


Freudenthal:1969:BVD


Freudenthal:1969:CIV


Freudenthal:1969:LAC


Freudenthal:1969:TCC


Freudenthal:1971:GBD

REFERENCES


Freudenthal:1972:ELL


Freudenthal:1974:CCD


Freudenthal:1974:SRT


Freudenthal:1975:PAI


Freudenthal:1976:R


Freudenthal:1976:P


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Guala:2017:CAM


Gresalfi:2012:WDO


Gellert:2013:TLI


Georgescu-Buzău:1970:IAP


Godino:2005:SAC

REFERENCES

Galbraith:1990:BSM


Galbraith:1990:FSC


Gomez-Chacon:2000:AIK


Gonzalez-Calero:2015:IAM


Galbraith:1992:TNT


Gravemeijer:1999:CPR

[GD99] Koen Gravemeijer and Michiel Doorman. Context problems in realistic mathematics education: A calculus course as an exam-


REFERENCES


REFERENCES

Gal:2010:SSA


Glaymann:1968:IAC


Glaymann:1969:IVS


Glaymann:1970:GC


Glaymann:1976:PEE


REFERENCES


REFERENCES

Goldin:2003:DCU


Gooya:2007:MTB


Goos:2014:E


Goos:2015:E


Goos:2016:E


Goos:2017:E


Goos:2018:E


REFERENCES


REFERENCES


Graham:2000:BVU


Gueudet:2009:TND


Gucler:2013:EDL


Gucler:2016:MIM


Gueudet:2008:IST

REFERENCES


REFERENCES


REFERENCES

226


Hamdan:2006:ESS


Hanna:1989:MA


Hanna:1995:BR


Hanna:1998:BRA


Hanna:2000:PEE


Hannula:2002:ATM


Handa:2012:TRR


Hansson:2012:MMI


Hartnett:1973:CPA


Harkin:1974:TTG


Harkin:1975:IG


Hart:1981:HME

REFERENCES


REFERENCES


[HBZE98] M. Kathleen Heid, Glendon W. Blume, Rose Mary Zbiek, and Barbara S. Edwards. Factors that influence teachers learning to do interviews to understand students’ mathematical un-


Hedren:1985:HHC


Heege:1978:TML


Heege:1985:ABM


Heitele:1975:EVF


Hemmi:2010:TSC


Hersh:1993:PCE


Herbel-Eisenmann:2010:ALB


Hewitt:2012:YSL


Herbel-Eisenmann:2010:LBA


Herbel-Eisenmann:2015:PME


Hilton:1982:BR


Hewitt:2012:YSL
REFERENCES


[HHDG16] Annette Hilton, Geoff Hilton, Shelley Dole, and Merrilyn Goos. Promoting middle school students’ proportional rea-


REFERENCES

(p. 238)

Houdement:1999:ECC

Hoyles:2002:SUL

Hillel:1989:SSG

Herscovics:1994:CGB

Hackenberg:2016:SDR
REFERENCES

Hasemann:1995:CMR


Heyd-Metzuyanim:2013:CCL


Hegedus:2011:EMS


Hossain:2013:TUM


Heyd-Metzuyanim:2016:BPP

REFERENCES

Heyd-Metzuyanim:2018:CFC


Hussain:2013:TSD


Hoyles:1992:PMM


Hoyles:1995:SMO


Hershkovitz:1996:RSD


Hoyles:2008:NSI

Hodgson:1996:SAV


Hennessy:1989:ITS


Homan:1977:TLB


Hoffmann:2006:WSP


Hollinger:1969:IGF

REFERENCES


REFERENCES

Howson:1975:UCF


Howson:1978:CME


Howson:1980:SME


Howson:1984:SFY


Hoyles:1982:PVM


Hoyles:1985:WPG

Hoyles:2001:DDM


Hoyrup:2007:RMB


Hoz:1981:ERS


Housman:2003:PSL


Hegedus:2008:SNF


REFERENCES


Harkness:2013:PUH


Heng:2013:BNM


Healy:2014:TUS


Harper:2015:BRR


Hitt:2017:RCA

Fernando Hitt, Mireille Saboya, and Carlos Cortés Zavala. Rupture or continuity: The arithmetico–algebraic thinking as an alternative in a modelling process in a paper and pencil and tech-


References


Iannone:2011:DGE


Inglis:2007:MMA


Iori:2017:OSR


Iori:2018:TAS


Inglis:2008:CIA


Hans Niels Jahnke. Cantor’s cardinal and ordinal infinities: an epistemological and didactic view. *Educational Studies*
REFERENCES


REFERENCES


REFERENCES


[Jerman:1973:PLSa]

[Jerman:1973:PLSb]

[Jones:2000:GE]

[Jorgensen:2014:SET]

[Jiang:2014:CSS]


Johnson:2018:LBS


Jones:2008:BGH


Jankvist:2015:FDR


Johnson:2015:TYS


Jones:1982:LMS

REFERENCES


REFERENCES


REFERENCES

Jones:1994:MNA


Jungwirth:1991:IGF


Jurdak:1977:SLV


Jurdak:2006:CPP


Jones:2017:BRA

REFERENCES

Kaasila:2007:MBK


Kaeley:1988:SDL


Kaeley:1990:ISE


Kaeley:1993:EMA


Kaeley:1994:EEM


REFERENCES

Kapadia:1977:CDP

Kapur:1978:CME

Kapadia:1980:DSE

Kapa:2001:MSD

Kapadia:2009:BRM

Kaput:2009:BII
REFERENCES

Karsenty:2002:WDA


Karsenty:2010:NMT


Kar:2016:ECA


Kaufman:1971:B


Kazima:2007:MSM


Katz:2007:SHA


[KC73] A. Z. Krygovska and Maria Ciosek. Quelques remarques sur le comportement des élèves concernant les problèmes mathématiques. (French) [Some remarks on the behavior of pupils concerning mathematical problems]. *Educational Stud-
MAN. ISSN 0013-1954 (print), 1573-0816 (electronic). URL 
http://link.springer.com/accesspage/article/10.1007/
BF01425410.

[KCs09] Donna Kotsopoulos and Michelle Cordy. Investigating imagi-
nation as a cognitive space for learning mathematics. Educa-
tional Studies in Mathematics, 70(3):259–274, April 2009. CO-
DEN EDSMAN. ISSN 0013-1954 (print), 1573-0816 (electronic). URL 
1007/s10649-008-9154-0.

[KC12] Vida Manfreda Kolar and Tatjana Hodnik Čadež. Analysis of 
factors influencing the understanding of the concept of infinity. Educa-
tional Studies in Mathematics, 80(3):389–412, July 
2012. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816 

[KD10] Ivy Kidron and Tommy Dreyfus. Justification enlightenment 
and combining constructions of knowledge. Educational Stud-
ies in Mathematics, 74(1):75–93, May 2010. CODEN EDSMAN. 
link.springer.com/accesspage/article/10.1007/s10649-
009-9228-7.

[KD14] Ivy Kidron and Tommy Dreyfus. Proof image. Educational 
Studies in Mathematics, 87(3):297–321, November 2014. CO-
DEN EDSMAN. ISSN 0013-1954 (print), 1573-0816 (electronic). URL 
1007/s10649-014-9566-y.

[Kei82] Christine Keitel. Curriculum variables, theory and goals: A 
comment on Begle’s critical variables in mathematics educa-
1982. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816 
article/10.1007/BF00311244.
REFERENCES


REFERENCES


Kaasila:2008:SEO


Konold:2015:DST


Kidron:2008:ACL


Kidron:2011:TMT


Kidron:2016:ENT


Kieran:1981:CAE

REFERENCES


REFERENCES


[Kle02] M. Klein. Teaching mathematics in/for new times: A post-structuralist analysis of the productive quality of the pedagogic

**Klein:2012:HIA**


**Knapp:2017:WAF**


**Kaiser-Messmer:1993:RES**


**Kelton:2018:RMS**


**Kramarski:2002:EMI**

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

[Landers:2013:TTM]

[Larsson:1986:GPE]

[Laugwitz:1974:MLA]

[Lawson:2000:BRL]

[Lawrence:2016:BRP]
REFERENCES


REFERENCES


REFERENCES


REFERENCES


Esther Levenson. Fifth-grade students’ use and preferences for mathematically and practically based explanations. *Educational...
REFERENCES


REFERENCES


[Lea18] Aisling Leavy and Mairead Hourigan. The role of perceptual similarity, context, and situation when selecting attributes: considerations made by 5–6-year-olds in data modeling environments.

[LH18]
Leron:1995:LGI


Libois:1971:MDS


Libeskind:1977:PSA


Liebeck:1990:SFI


Lin:1988:SDT


Lin:1990:ESI

Ng Li Fung Lin. The effect of superfluous information on children’s solution of story arithmetic problems. *Ed-
Lithner:2000:MRS


Lithner:2003:SMR


Lithner:2008:RFC


Lee:2013:LML


Lagrange:2014:DTT

REFERENCES


REFERENCES


[LLW07] Roza Leikin and Anat Levav-Waynberg. Exploring mathematics teacher knowledge to explain the gap between theory-based rec-

[Lange:2011:ASS]


[Lesh:2008:SND]


[Long:1970:RME]


[Luis:1991:CEA]


[Lochhead:1992:KBB]

REFERENCES

Lockwood:2011:SCA

Lorenz:1982:SPA

Louie:2018:CIM

Lorenz:1991:BR

Laborde:2005:ITS
REFERENCES

Lop:2004:RME


Lang:1981:GES


leRoux:2016:CDA


Lamon:1970:ISE


Lowenthal:1979:LJA


Lee:2011:CRC

Lau:2009:CMI


Lemoine:1986:AMP


Lunkenbein:1977:RTI


Lunkenbein:1982:BR


Lundin:2012:HSL

REFERENCES


Lerman:2002:DTM


Lin:2018:MTE


Lyness:1968:AME


Larsen:2008:PRU


Ma:1996:ECH

Mulat:2009:SMW


MacDonald:1978:IIM


Macnab:2000:RSM


Moreno-Armella:2008:SDM


Maines:1985:PNT


Makar:2014:YCE


REFERENCES


Maury:1985:IQE


Maschietto:2009:WAG


Magargee:2016:DEN


McClain:2001:SSA


Margolinas:2005:WCT


REFERENCES

Mamona-Downs:2001:LIB


Mamona-Downs:2004:RTP


Masingila:1996:MLP


Meaney:2013:WRM


Menger:1971:GRM

Mendes:2007:NLB


Mesquita:1989:SED


Mesa:2004:CPA


Mevarech:1983:DSM


Meyer:2010:ALV


Mariotti:1997:DCA

Malaspina:2010:RIS


Markovits:2017:TML


Miyazaki:2017:SUS


Manouchehri:2000:IMR


Marrades:2000:PPS


REFERENCES


REFERENCES


REFERENCES

Moore:2016:PUP


Moskal:2000:MSW


Magajna:2003:AMT


Manizade:2011:UDM


Martin:2005:ITS

Meletiou-Mavrotheris:2015:DSR


Moreira:1995:UT


McIntosh:1995:MCP


Mellin-Olsen:1981:IEC


Morony:1994:SIA


Monaghan:2006:AC

REFERENCES


REFERENCES


Moschkovich:1998:SUI


Moschkovich:2004:AMP


Moseley:2005:SEM


Moschkovich:2007:UTL


Motte:1971:MAD

REFERENCES

Moyer:2001:WHF


Mason:1984:GES


McLeay:1996:MMD


Martinez:2014:RBI


Mata-Pereira:2017:ESM


Martinez-Planell:2012:SUG

Rafael Martínez-Planell and María Trigueros Gaisman. Students’ understanding of the general notion of a function of two variables.
Martinez-Planell:2012:SCI


Maheux:2012:BRR


Metaxas:2016:ATP


Meaney:2017:BRH


Moyer:2018:AHS

John C. Moyer, Victoria Robison, and Jinfa Cai. Attitudes of high-school students taught using traditional and reform mathematics curricula in middle school: a retrospective analysis.
Moore-Russo:2011:CSN

Mejia-Ramos:2012:AMP

Morton:1994:CST

Moutsios-Rentzos:2014:ORA

Mejia-Ramos:2014:WHM
REFERENCES


REFERENCES


[MWVE09] Mariana Montiel, Miguel R. Wilhelmi, Draga Vidakovic, and Iwan Elstak. Using the onto-semiotic approach to identify

**Minato:1984:RBS**


**Mueller:2012:FAC**


**Mamolo:2012:SCS**


**Nardi:2000:MUR**


**Nardi:2016:WFS**

Elena Nardi. Where form and substance meet: using the narrative approach of re-storying to generate research findings and


REFERENCES


References


Newstead:1998:ACM


Nemirovsky:2009:MIE


Ng:2016:IBL


Nesher:1982:DSC


Nesher:1994:RST


REFERENCES


Nkhoma:2002:WSB


Nunes:1998:SAB


Nemirovsky:1997:MVP


Newton:2007:CEM


Noelting:1980:DPRa


Noelting:1980:DPRb

Gerald Noelting. The development of proportional reasoning and the ratio concept. Part II — problem-structure at successive


REFERENCES


OBrien:1972:LT


OBrien:1973:LTC


OBrien:1975:DFC


OBrien:1976:TIE


OBrien:1977:IPR


Ouvrier-Buffet:2006:EMD

REFERENCES


Okazaki:2005:CGL

Olson:2013:WPM

Olson:1987:LLL

Olande:2014:GAT

Ongstad:2006:MME

Owens:1998:RAP
REFERENCES


Orlov:1971:EVU


Orton:1983:SUD


Orton:1983:SUI


Oslund:2012:MTW


OBrien:1971:LTL


Osterholm:2006:CRC

REFERENCES


Otte:1976:BRD


Otte:1994:MKP


Otte:2003:CSN


Otte:2006:MEP


Otte:2007:MHP


Otte:2011:ELS

Michael Friedrich Otte. Evolution, learning, and semiotics from a Peircean point of view. Educational Studies in Mathematics, 77
Otte:1985:C

Parker:2014:STS

Pais:2011:CCE

Pais:2013:ICU

Pais:2015:SRM

Pais:2016:IBS
Alexandre Pais. At the intersection between the subject and the political: a contribution to an ongoing discussion. Educa-


REFERENCES


[PC98] George N. Philippou and Constantinos Christou. The effects of a preparatory mathematics program in changing prospec-

**Pittalis:2010:TRG**


**Pea:1991:BR**


**Peters:2012:CUS**


**Pijls:2007:RCM**


**Peaker:1976:CID**


Jungeun Park, Beste Güçlü, and Raven McCrory. Teaching prospective teachers about fractions: historical and pedagog-
REFERENCES


REFERENCES


Pirie:1994:GMU


Palatnik:2017:SMC


Paoletti:2018:TQI


Planas:2014:OST


Planas:2018:LRK


Pluvinage:1979:LQP

F. Pluvinage. Loto-questionnaires (pour l’évaluation et l’autocontrôle en mathématiques). (French) Loto-questionnaires (for


[PM16] Frederick Peck and Michael Matassa. Reinventing fractions and division as they are used in algebra: the power of preformal productions. *Educational Studies in Mathematics*, 92
Ponte:1994:TSV


Pozzi:1998:TPM


Pollak:1968:SPT


Pollak:1969:HCW


Pollak:1976:WIW

REFERENCES


REFERENCES


Presmeg:2003:CMD


Presmeg:2006:SCS


Presmeg:2007:BRP


Presmeg:2009:E


Presmeg:2010:E


Presmeg:2011:E

REFERENCES

Presmeg:2012:E

Presmeg:2013:Ea

Presmeg:2013:Eb

Presmeg:2016:CLR

Proia:1969:ETG

Proia:1970:ELC
REFERENCES

Proulx:2013:MME


Paries:2008:ASC


Przenioslo:2004:ILF


Przenioslo:2005:ICC


Pirie:1988:MDM

REFERENCES


REFERENCES


REFERENCES


REFERENCES


**Ron:2010:PCC**


**Radford:2009:IBW**


**Relich:1996:GSC**


**Revuz:1968:PEM**


**Revuz:1969:PAF**


**[Recio:2001:IPM]**


**[Ruthven:2002:PMU]**


**[Roy:2017:MRD]**


**[Richard:2004:LFR]**


**[Rico:2010:BRF]**

REFERENCES


Ryve:2012:EMT


Ryve:2013:AEC


Riordain:2009:RBP


Roberge:1975:DCL


Robinet:1986:RQM

Robitaille:1990:ACB


Robert:1995:ADN


Robotti:2012:NLT


Rodd:2006:CME


Roganovskij:1971:AAT


Rogerson:1985:MMS


REFERENCES


REFERENCES


[RRP91] Barbara J. Reys, Robert E. Reys, and Alfino Flores Peñafiel. Estimation performance and strategy use of Mexican 5th and 8th


REFERENCES

Roscelle:2008:RSR

Ruedel:2013:HSL

Ruthven:1987:ASM

Ruthven:1989:EAA

Ruthven:1989:GE

Ruthven:1990:IGC


REFERENCES


REFERENCES


REFERENCES

Samurçay:1985:SFD


Santi:2011:OSF


Sarrazy:2002:HEM


Sayers:1994:GDM


Schmidt:1997:RAA

Stinson:2012:CPT


Scandura:1969:URB


Sierpinska:2011:TA


Spalt:1986:BR


Swetz:1983:MEE


Simmons:1990:FKA

Simmons:1993:ARE

Sarouphim:2017:MEL

Scandura:1971:RBT

Scandura:1975:HDM

Schuster:1971:TGP

Schipper:1983:TPT
REFERENCES


REFERENCES


REFERENCES

See, for instance, Selter:2001:AST.


Semusin:1970:SGF


Semadeni:1984:PCP


Semadeni:2008:DIL


Sensevy:1996:FPF

REFERENCES

Senger:1998:RRM

Servais:1968:CEM

Servais:1969:LEM

Servais:1976:PAM

Schmidt:1984:BR

Sfard:1991:DNM
REFERENCES


REFERENCES


REFERENCES


Sierpinska:2004:BSR


Silver:2013:PPR


Simon:1994:LML


Simon:1996:BID


Simpson:2015:AMP


Simon:2017:EMC

REFERENCES


Singh:2000:UCP


Sinclair:2003:SIR


Siu:1993:PPA


Siwek:1973:LFR


Steele:2004:STV

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

1986. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816
article/10.1007/BF00305074.

[Sol95] Claudie Solar. An inclusive pedagogy in mathematics edu-
1995. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816
article/10.1007/BF01274179.

[Sol06] Yvette Solomon. Deficit or difference? The role of students’
epistemologies of mathematics in their interactions with proof.
*Educational Studies in Mathematics*, 61(3):373–393, March
2006. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816
article/10.1007/s10649-006-6927-1.

in mathematics. *Educational Studies in Mathematics*, 80(1–
com/accesspage/article/10.1007/s10649-012-9384-z.

[Son13] Ji-Won Son. How preservice teachers interpret and respond
to student errors: ratio and proportion in similar rectangles.
*Educational Studies in Mathematics*, 84(1):49–70, September
2013. CODEN EDSMAN. ISSN 0013-1954 (print), 1573-0816

[Son16] Ji-Won Son. Moving beyond a traditional algorithm in whole
number subtraction: Preservice teachers’ responses to a student’s
105–129, September 2016. CODEN EDSMAN. ISSN 0013-1954
Souviney:1983:MAL


Sandoval:2016:ADR


Samper:2016:DUE


Speer:2005:IMT


Straehler-Pohl:2014:SMR

Selter:2012:TDD


Stouraitis:2017:CDO


Singer:1992:RPR


Solomon:2016:CAV


Sriraman:2018:BRA

REFERENCES


[N. Sinclair and M. Schiralli. A constructive response to ‘where mathematics comes from’. *Educational Studies in Mathematics,*]


REFERENCES


Sdrolias:2008:TSS


Sinclair:2010:DSM


Stacey:1989:FUP


Stacey:2011:BRJ


Steiner:1968:EEM


Steiner:1969:EEM


REFERENCES


REFERENCES


REFERENCES


REFERENCES

[Shreyar:2010:TA]

[Tarim:2008:ECL]

[Tabach:2013:CWG]

[Tabach:2008:TAD]

REFERENCES


Temple:2012:DFM


Turner:2013:LBT


Torbeyns:2009:AUS


Tirosh:1997:DDC


Tsatsaroni:2014:ANT


Thompson:1984:RTC


Thornton:1985:BBN


Thornton:1990:SSS


Thompson:1993:QRC


Thompson:1994:YCI


Thompson:1994:IRO

REFERENCES


REFERENCES


REFERENCES

Tsamir:2013:USG


Touyarot:1971:IMR


Tourniaire:1986:PES


Toumasis:1990:EEG


Tourniaire:1985:PRR


Thom:2002:PPM

REFERENCES


REFERENCES


REFERENCES


REFERENCES


Tall:1991:EVT


Tall:2001:INE


Thomaidis:2007:NHP


Tsamir:2008:INC


Tirosh:2013:EYC


REFERENCES


REFERENCES


REFERENCES


REFERENCES

VanEst:1993:HFS


VanDenHeuvel-Panhuizen:1994:IDA


VanAmerom:2003:FIS


VanDenHeuvel-Panhuizen:2003:DUM


Varga:1972:LPL


Varga:1976:PST

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


vanOers:2013:CIM


Villarroel:2017:SRS


Vogeli:1970:SAC


Vogel:2013:MSP


Voigt:1994:NMM


Vollrath:1969:SAA

REFERENCES


Vlaardingerbroek:1990:ETR


Vredenduin:1969:CFV


Vahey:2012:CDA


VanDenBrink:1979:YCR


Vithal:1997:EIC

REFERENCES


REFERENCES


Wallrabenstein:1973:ETI


Walther:1976:BGT


Walshaw:2010:BRT


Walshaw:2012:BRI


Walshaw:2017:BRL

REFERENCES


REFERENCES


REFERENCES


REFERENCES


Weiss:2009:TPA


Wheatley:1992:RRM


Wheeler:1996:BR


Wagner:2008:JDS


Wagner:2009:RMM

REFERENCES


[Wil78b] B. J. Wilson. Change in mathematics education since the late 1950’s — ideas and realisation West Indies. *Educational


REFERENCES


REFERENCES


REFERENCES

Wittmann:1984:TUI

Wittmann:1995:_MED

Wittmann:2001:DME

Witten:2005:DMC

Wilkerson-Jerde:2011:HDM

Watson:2004:SVC
REFERENCES

in Mathematics, 57(1):121–144, July 2004. CODEN EDS-
B%3AEDUC.0000047053.96987.5f.


REFERENCES


REFERENCES


Weinberg:2011:UMT

Weinberg:2016:MLN

Wagner:1986:IFM

Xu:1988:CSS

Xie:2017:EIB


Yerushalmy:2000:PSS


YG99


YHL+15


Yim:2010:CSD


Yang:2008:MRC


[Zah15]  William Zahner. The rise and run of a computational understanding of slope in a conceptually focused bilingual algebra
REFERENCES

Zassenhaus:1971:GDC


Zaslavsky:2005:SOC


Zazkis:1998:OEO


Zazkis:1999:IRN


Zehavi:1985:QEM

REFERENCES


REFERENCES


Zandieh:2017:CUN


Zevenbergen:1996:CLB


Zevenbergen:2004:TNI


Zevenbergen:2006:SPC


Zevenbergen:2011:YWT

REFERENCES

Zack:2001:MMM


Zazkis:2015:FDI


Zazkis:1991:CCT


Zazkis:2002:GPT


Zazkis:2008:EDC


Ziqiang:1991:MEC

REFERENCES


