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Title word cross-reference

× [GML⁺23].

1 [LRS21, Zin15]. **12**
[BBSPK22, GES14, GYSH19, HAGM14,
HAG15b, JK20, OWK21, TM14, TSAA⁺23].
16-18 [All23]. **19** [MSV⁺23].

2 [RSL22].

6 [IKWR22].

7th [SA20].

= [GML⁺23].

ABC [REB23]. **ABET** [Blu22]. **Abilities**
[AJNN20, JNA18]. **Abstraction**
[DSU20, KDV22, SSD09, SA20]. **Academia**
[NJK19]. **Academic** [KPM18]. **Academics**
[SDBJ19]. **Academies** [DLM11].

Accessibility
[CGZ⁺20, PLB⁺12, WCPF20, vdMHVH23].

Accomplishment [ZD15]. **according**
[MM12]. **Accreditation** [Blu22].

Achievement
[AANK14, BJCS21, CHA17, Zin15]. **ACM**
[Ko22a, TM09, CB19]. **Across** [AM21].
Action [IT17, LMGVS⁺16]. **Active**
[VI13, IT13]. **Activities**
[MDS16, MJC23, RKM20]. **Activity** [LC21].

Adaptive [VMAG22]. **Adding**
[BLNC09, DJHGI19]. **Address** [RvJP20].
Adoption [EHBA⁺23]. **Affect** [TAL17].

affordable [AGEL13]. **African** [EKSW11, TSAA⁺23]. **After** [PHRC21]. **After-Hours** [PHRC21]. **Agenda** [HOC17, SF19, TS20]. **Agents** [Par23]. **Agile** [FEC17, MSH10]. **AI** [TMSA22]. **Algorithm** [Kar09, RVI09, SCA⁺10, UFVI09]. **Algorithmic** [Kie09]. **Algorithms** [EK17, VI13]. **Alice** [Coo10, UCK⁺10]. **Alignment** [Blu22]. **All-Female** [LBT20]. **Alleviate** [KV15]. **Alliance** [DBBR11, GHT⁺11]. **Alone** [SNG⁺22]. **Aloud** [WSLR23]. **Alternative** [BC12]. **alternatives** [Gri13]. **Among** [MSV⁺23, Blu22]. **Analogical** [KMW22]. **Analysis** [Akd23, AANK14, BF23, DSUP20, GGT20, KG22, LMGVS⁺16, LSSM19, PDF15, RVAN15, Shi16, UR17, ZJWF11]. **Analytics** [GBB⁺17, GK17, HOC17, KG18, TWH18]. **Analyze** [VFFT16]. **Analyzing** [AHL17]. **Android** [Mod21]. **Animation** [Kar09, UFVI09]. **Answer** [JK20, Sho23]. **Answers** [HAG15b]. **AP** [SNG⁺22]. **API** [TCK21]. **Application** [CG19, Mod21, RMNC10]. **Application-Oriented** [RMNC10]. **Applications** [KMW22, TWH18]. **Applying** [ETN⁺21]. **Approach** [AANK14, BKZL23, BHHMG21, BC12, CMSP20, ETN⁺21, Joh19, KLS⁺14, MFM⁺16, Mod21, PGJS17, TAL17, VS22, CHM13]. **Approaches** [CHU⁺09, GBB⁺17, KLM15, KA16]. **Apps** [CMSP20]. **Aptitude** [VCMV23]. **Architecture** [Mit14, Shi16, SPR12, Wan11]. **Architecture-Based** [Shi16]. **architectures** [ZPB13]. **Areas** [KS14]. **Arising** [LC21]. **Art** [Ip12, PLF22]. **Artificial** [AMD22, LGGS22]. **Artists** [Fie19]. **Arts** [BBD⁺10, BB10, BCD10, WK10]. **Asking** [Ten14]. **Aspects** [NCW22]. **Assembly** [SPR12]. **Assess** [HCAT23]. **assessed** [Lar16]. **Assessing** [BCZ19, DTT16, FDW19, Mod21, PGJS17]. **Assessment** [DJGIO20, DHH⁺15, Lai22, LFU23, LIG22, NCW22, PLF22, PE23, Ric09, RB22, SDBJ19, VMAG22]. **Assessments** [Alb20]. **Assessors** [DJGIO20]. **Assignments** [AvdM21, RRKP13]. **Association** [BSS20]. **Associations** [PCH09]. **Athletic** [Joh19]. **Attitudes** [BBF⁺21, LLF22, PLB⁺12, RVSW23, REB23, TABA12]. **AuDeNTES** [MM12]. **Audience** [AMD22]. **Autograding** [HBVTN21]. **Automata** [IIRY17]. **Automated** [KJH19, PLF22]. **Automatic** [LFU23, MM12]. **Average** [TWH18]. **Aware** [VGRM19]. **Awareness** [VGM⁺23]. **Back** [RS14]. **Backward** [TM15]. **Bare** [LMGVS⁺16]. **Barrier** [Ros23]. **Barriers** [GYSH19, PGJS17, Par23]. **Based** [AAGH14, BL14, DTT16, GGT20, GBB⁺17, HHM19, HOC17, KCB⁺23, Lai22, LMGVS⁺16, MFR13, MFM⁺16, MR22, O'G12, RT15, Ric09, RV09, RMNC10, SSSC18, Shi16, TAL17, WW17, HM22, MGM⁺23, Mod21, VS22]. **Basic** [WZL⁺22]. **BDSI** [WZL⁺22]. **Be** [SNG⁺22, LGP13, Ros23]. **Behavior** [CHA17, DSS21, LFU23, LSTA22, PGJS17]. **Behaviours** [BBF⁺21]. **Behind** [PLB⁺12]. **Being** [RHSS20, VGM⁺23]. **Beliefs** [BA17, FPSS22, FPSS23, REB23, Ros23]. **Benchmarks** [HB15]. **Benefit** [DCW19]. **Benefits** [MFCLG19]. **Berkeley** [CHH⁺11]. **Between** [DJGIO20, FPSS23, LRVW14, SDBJ19]. **Beyond** [Lai22, PG23]. **Bi** [Vog21]. **Bi/Multilingual** [Vog21]. **Bidirectionally** [RG19]. **Binary** [PCH09, RVSW23]. **Black** [BSA⁺23, LGGS22, RTE21, RHSS20, ETN⁺21]. **Blending** [CHA17, IT17]. **Block** [GBB⁺17, WW17]. **Block-Based**

[GBB⁺17, WW17]. **Blocks** [CG19]. **Bloom** [DTT16]. **BlueJ** [BS10]. **Body** [DTT16]. **Bolstering** [BSA⁺23]. **Boolean** [HLKZ12]. **Boot** [LG21]. **Botswana** [TSAA⁺23]. **Boy** [DBR⁺20]. **Brain** [CG19]. **Brain-Computer** [CG19]. **Brains** [CG19]. **Brazilian** [DBG⁺23]. **Bridge** [HM21]. **Bridging** [LRVW14]. **Briefs** [MR22]. **Bring** [RWK⁺15]. **Bringing** [HB15]. **Broadening** [CHH⁺11, DBBR11, LV11a, LV11b, Ros23]. **Bugged** [ABCD20]. **Building** [SGHZS19].

C [WX18]. **Calculus** [CKSS21]. **California** [TMSA22]. **Camps** [LG21, OPC17]. **Can** [ASG19, IDC⁺19, LGP13, SNG⁺22, Sho23]. **Candidate** [BKZL23]. **Capital** [VSK22]. **Capitalize** [IDC⁺19]. **Capstone** [DJGIO20, PD22, TBP21]. **Capstones** [SH18b]. **Capturing** [Lar16]. **Cards** [TBP21]. **Career** [DBR⁺20, LRJ14, MHP20, RHSS20, SNG⁺22]. **Careers** [BCZ19, OPC17, PG23, RCS11]. **Case** [BBD⁺10, BAR14, BCC⁺19, BWE11, DMBP22, GND19, GM11, KMB⁺15, LSSM19, Par23, SSD09, VS22]. **Cash** [RMM21]. **Cash-free** [RMM21]. **Centered** [GMM17, LRS21, NAG⁺23, RSL22, RC13]. **CER** [DM23]. **Challenges** [ALHR17, BBG12, GES14, SGHZS19, VGRM19, VGM⁺23]. **Change** [FPSS22, PS21]. **Characteristics** [All23]. **Characterizing** [YB19]. **Chat** [HCAT23]. **Chatbot** [PD22]. **ChatGPT** [Sho23]. **Child** [HHM19]. **Children** [DCW19, WDC15, WDCT20, vdMHVH23]. **China** [CJS⁺17]. **Chinese** [TB16]. **Choice** [ASG19, LRJ14, MHP20, RHSS20]. **Choices** [MDS16]. **Chutes** [LD19]. **CISing** [YBV23]. **Class** [BHHMG21, PCH09, YR15]. **Classes** [Xin15]. **Classifying** [All23, SPC19]. **Classroom** [BWE11, GMM17, HB15, LSSM19, MRG17, SSSC18, Gri13]. **Classroom-Based** [SSSC18]. **Classrooms** [RPT⁺22, WW17, ZCJR20]. **cloud** [ZPB13]. **clouds** [RRKP13]. **Coaches** [IKWR22]. **Coaching** [MRG17]. **Code** [ABCD20, CJS⁺17, DJHGI19, ILRD20, NCW22, VMFG17, HAA13, LC21, NJK19]. **Code.org** [MMFR20]. **CodePlus** [LBT20]. **Coding** [BKZL23, KO22b, LG21, TK16, TMSA22]. **Cognition** [Rob22]. **Cognitive** [DZS22, LRJ14, RJJ10, TAL17]. **Cohort** [BTF⁺19]. **Collaboration** [Bol22]. **Collaborative** [CDK⁺14, MBSBA09, VFFT16]. **College** [BJCS21, BSS20, CKSS21, EKS11, GMM17, LR11, LD19, MDS16, RP19, WDK20]. **Colleges** [She13]. **Collusion** [KSCP22]. **Color** [DMBP22]. **Combining** [CDB⁺22, HCAT23]. **Comments** [VMFG17]. **Communication** [BBG12, KKNL21, MGM⁺23]. **Communications** [MAK12]. **Communities** [LC21]. **Community** [FKG17, LD19]. **Como** [Vog21]. **Comparing** [DSU20, ECF18, WW17]. **Comparison** [CJS⁺17]. **Competence** [SSB⁺23, TSK12]. **Competency** [BF23, Lai22]. **Compiler** [SSD09]. **Complexity** [EK17, KDV22]. **Complications** [TSV18]. **Comprehension** [KDV22]. **Compulsory** [DJHGI19, Hub12]. **Computational** [FKG17, FEC17, GBB⁺17, KLS⁺14, KCB⁺23, KKNL21, KO22b, Lai22, LIG22, MBR23, PE23, RG19, SNOT21, TM11a, VMFG17, WDC15, WDCT20, WHS⁺17, WSP⁺11, YMZ⁺14, YR15]. **Computer** [AZK⁺20, All23, Arm11, BVNN22, BBD⁺10, BB10, BDDGT14, BAR14, BSA⁺23, BHHMG21, BBG12, Ber23, Blu22, BJCS21, BWE11, BBF⁺21, BSCH14, BCD10, BSS20, CKSS21, CMSP⁺19, CMSP20, CG19, CHP⁺18, DCW19, DJGIO20, DBR⁺20, EBC⁺21, EHPR⁺23, EHBA⁺23, FPSS22, GES14, GM14, GM11, GMM17, GbGG⁺23, HB15, HM22, HHM19, Hub12, HAGM14,

HAG15b, IIRY17, IKWR22, JMN⁺22, JK20, KWB20, KS14, KFME11, KMB⁺15, Lai22, LK19, LMGVS⁺16, LLF22, LZRO21, LSHY22, LD19, MFM⁺16, MHP20, MRG17, MMFR20, MW18, MR22, MSV⁺23, NAG⁺23, PLF22, PGJS17, Par23, Pet19, PS21, PO20, RVAN15, RSPB17, RJJ10, RWK⁺15, REB23, RHSS20, RV09, RCS11, Ryo19, SNG⁺22, She13, SPR12, SA20, TK16, TB16, UR17, VCMV23, VFFT16, VSK22, Wag16, WK10, WW17, WDK20, YB19, YBV23].

Computer [YVQ⁺10, ZNF⁺20, ZCJR20, ZJWF11, AGEL13, Gri13, KG22, LGP13, Zin15].

Computer-Based [Lai22]. **Computes** [GEME14]. **Computing** [AM21, Bar09, BH16, BMB⁺18, BBF⁺21, Bur11, CHA17, CAL15, CB19, CGZ⁺20, DBBR11, DMBP22, DLM11, DZS22, DBG⁺23, EKSW11, EBC⁺21, ETN⁺21, ET12, ECF18, GND19, GHT⁺11, GGH⁺10, GYSH19, GK17, HSI⁺19, HCSAz22, HM22, HOC17, KLS⁺14, KG18, LRS21, LV11a, LV11b, LSTA22, LR11, LRH⁺22, LG21, MFR13, MHP20, MSK⁺23, MT23, MBE⁺16, MAHC⁺22, MDS16, MCK17, MW22, MS11, NAG⁺23, O'G12, OWK21, OHR22, PM09, PG23, RB21, Rob22, RLN⁺22, RHSS20, RP19, RvJP20, RMM21, RSL22, SH18a, SDBJ19, SNG⁺22, SSSC18, SH18b, SS23, TP23, TM09, TM10, TM11a, TM11b, TM14, TC19, TM22, TSAA⁺23, WCPF20, YR15, AGEL13, HAA13, NCLN13]. **Concept** [GGH⁺10, IIRY17, PHP⁺22]. **Conceptions** [RvJP20, VS22, Xin15]. **Concepts** [AWW15, KLS⁺14, KA16, MS11, WBK⁺22, YZC19]. **Conceptual** [TPQE18]. **Conceptualizing** [MT23, TM22, Ten23]. **concurrency** [CHM13]. **concurrent** [BAGM13]. **Conditions** [RPT⁺22]. **Consider** [NCW22]. **Considerations** [TBP21]. **Considered** [DJGIO20]. **Considering** [CGZ⁺20]. **Consortium** [BCD10]. **construction** [NCLN13]. **Constructionist** [MSH10].

Content [BSS20, EHBA⁺23, VMAG22, WCPF20, YB19]. **Context** [GEME14, LZRO21, ORS16, Rob22]. **Contingency** [AHL17]. **Continue** [Ros23]. **Continues** [Hun17]. **Continuing** [All23]. **Continuum** [CB19]. **Contributions** [DM23, HCAT23]. **Controlled** [Bol22, DSUP20, DSU20, MC19, WX18]. **Conversation** [Ros23]. **Conversion** [HM21]. **Cooperative** [BC13]. **Coordinator** [RB22]. **Copying** [DJHGI19]. **Core** [JNA18, ZPB13]. **Correctness** [DHH⁺15]. **Counter** [EBC⁺21]. **Counter-hegemonic** [EBC⁺21]. **Countries** [GES14, TSAA⁺23]. **Country** [RVSW23]. **Course** [AHL17, BHHMG21, BTF⁺19, BCZ19, CKSS21, CDCLK17, EK17, IT17, KKLL16, LLKH18, MTGM21, NGK11, PDF15, RB22, Rit09, She13, SH10, WX18, Wan11, d'A10]. **Courses** [ASG19, CHA17, CDK⁺14, Ip12, MFCLG19, Mit14, OHR22, Ric09, RB22, SSF⁺19, SNG⁺22, SBH⁺18, TBP21, TK16, UR17, VMAG22, HAA13, LGP13]. **Coverage** [ECF18]. **COVID** [MSV⁺23]. **COVID-19** [MSV⁺23]. **CPD** [All23]. **Crafts** [KLS⁺14]. **Crafts-Oriented** [KLS⁺14]. **Creating** [Rit09]. **Creation** [RWK⁺15]. **Creative** [Fie19]. **Creativity** [ALP12, Sha22]. **Creativity-Supporting** [ALP12]. **Critical** [GHT⁺11, HOC17]. **Cross** [RVSW23, TM14]. **Cross-Country** [RVSW23]. **Cross-National** [TM14]. **Crossing** [HM21]. **CS** [Blu22, FPSS22, GML⁺23, HM21, KV15, LBT20, MJB⁺23, MSP21, PLB⁺12, RVSW23, RVAN15, RTE21, RB22, SWL⁺22, TABA12, TWH18, VTB⁺20, VS22]. **CS1** [BC13, ORS16, Sha22]. **CS2** [TPQE18]. **CS4HS** [RSPB17]. **CSF** [HBVTN21]. **CSLE** [ALP12]. **CSS** [PDF15]. **CSTutor** [BL14]. **CUDA** [DSU20]. **Current** [ALHR17, CAL15, RB21]. **Curricula** [AJNN20, BCD10, WCPF20]. **Curriculum**

[Blu22, BMB⁺18, DTT16, McG12a, NAG⁺23, WHS⁺17, AGEL13]. **Cyber** [AJNN20, JNA18]. **Cyber-Defense** [JNA18]. **Cybersecurity** [BF23, JNA18, LRVW14, PHP⁺22]. **Cyprus** [CJS⁺17].

Dance [DMBP22]. **Darmstadt** [RVAN15]. **Data** [AHL17, BA17, BL14, CHU⁺09, GBB⁺17, HCAT23, WZL⁺22, YR15]. **Data-Driven** [GBB⁺17, YR15]. **Database** [MTGM21]. **Debieron** [Vog21]. **Debugger** [BS10]. **Debugging** [ABCD20, WSLR23]. **Decade** [CHH⁺11, JK20]. **Decisions** [HM22]. **Defense** [AJNN20, JNA18]. **Degree** [AANK14, McG12a]. **Demo** [KDXB18]. **Demo-Oriented** [KDXB18]. **Demographics** [LZRO21]. **Derived** [AHL17]. **Describing** [HLKZ12]. **Descriptive** [Blu22]. **Design** [BC13, BC12, Bur11, CMSP⁺19, Coo10, DCW19, EKSW11, GML⁺23, Ip12, Joh19, KCB⁺23, LSSM19, OWK21, PCH09, RWK⁺15, RG19, RLN⁺22, Shi16, TSK12, TP23, Xin15]. **Design-Based** [KCB⁺23]. **Designers** [MW22]. **Designing** [BBSPK22, NCLN13, OHR22, Ric09]. **Desk** [Hun17]. **Detection** [MM12, NJK19]. **Developing** [MHP20, MR22, TSK12, WHS⁺17]. **Development** [All23, AWW15, BCZ19, BCC⁺19, BBF⁺21, CG19, HM19, HCAT23, Ip12, JMN⁺22, KO22b, Lar16, MSK⁺23, MJB⁺23, MW22, MC15, Mod21, PDF15, PHRC21, RSPB17, Rit09, REB23, VS22, VGRM19, VGM⁺23, ZD15]. **Devices** [RP19, TSK12]. **Diagnosing** [Kie09]. **Dialog** [KDM⁺23]. **did** [IT13]. **Didactical** [BDDGT14]. **Difference** [AM21]. **Differences** [Har21, RVSW23, SDBJ19]. **Different** [DSU20, DM23, KLM15, KA16, TAL17]. **Difficult** [EK17, YZC19]. **Difficulties** [HLKZ12, LBK11, MS19, QL17]. **Digital**

[BC12, MW18, RG19]. **Dimensions** [TB16]. **Directed** [MBE⁺16]. **Directedness** [BBSPK22]. **direction** [IT13]. **Discipline** [MFR13, Pet19, TM10]. **Discipline-Based** [MFR13]. **Discovering** [VGRM19]. **Discrepancies** [DJGIO20]. **Discrimination** [LLF22]. **Discussion** [UCK⁺10]. **Disrupting** [RLN⁺22]. **Distributed** [BTF⁺19, BCZ19, BCC⁺19, ORKH09]. **District** [PS21]. **District-Wide** [PS21]. **Diversified** [SNG⁺22]. **Diversity** [BVNN22, BCC⁺19, GML⁺23, GYSH19, LLF22, RBSS11]. **division** [LGP13]. **Do** [BBG12, LRH⁺22, MSP21, NCW22, TAL17, CHP⁺18, HM22]. **Does** [DCW19]. **Doesn't** [MS11]. **Domain** [Bol22, MSK⁺23]. **Domain-specific** [MSK⁺23]. **Domains** [LRVW14]. **Don't** [GVA22]. **down** [ZPB13]. **down-to-earth** [ZPB13]. **Driven** [GBB⁺17, Shi16, YR15, CHM13, LMH21]. **Drop** [DBG⁺23]. **Drop-out** [DBG⁺23]. **Dual** [Rob22]. **During** [RKM20, RJJ10, AL22]. **Dynamic** [CHU⁺09].

Early [CHA17, MR22, OHR22, RSPB17, HAA13]. **EarSketch** [MFM⁺16]. **earth** [ZPB13]. **Easy** [WBK⁺22]. **Editor** [Hun17]. **Editorial** [MT23, RVI09, TM11a, TM11b, TM14, TM22]. **Editors** [BB10]. **Educating** [KSCP22]. **Education** [AMD22, AM21, BDDGT14, BLM⁺14, Blu22, BH16, BCC⁺19, BBF⁺21, Bur11, CAL15, CB19, CJS⁺17, DZS22, EKSW11, EBC⁺21, ET12, Fie19, GES14, GND19, GVA22, GbGG⁺23, GK17, GEME14, HSI⁺19, HCSAz22, HM19, HHM19, Hub12, HAGM14, HAG15b, HOC17, ILRD20, IIRY17, IKWR22, JK20, Joh19, KMW22, Kie09, KCB⁺23, KMB⁺15, KG18, KV15, LRS21, LV11a, LV11b, LMB⁺22, LSTA22, LMH21, LRVW14, LSHY22, MFR13, MFM⁺16, MSK⁺23, MT23, MSV⁺23, MCK17, MW22, O'G12,

OWK21, PLF22, PGJS17, PM09, RVAN15, RTE21, RWK⁺15, RLN⁺22, RVI09, RSL22, SAyC⁺21, SH18b, SKM13, SS23, TS20, TP23, TM10, TM11a, TM11b, TM14, TC19, TM22, TWH18, TSAA⁺23, VMFG17, VSK22, YMZ⁺14, NCLN13, Sor13, TM09, CB19]. **education-friendly** [NCLN13]. **Educational** [Har21, KS14, LRH⁺22, MC19, UR17, ZPB13]. **Educator** [BA17]. **Effect** [Blu22, MMFR20, RHSS20]. **Effective** [All23, ORS16, RJJ10, LGP13]. **Effectively** [ORKH09]. **Effectiveness** [MGM⁺23]. **Effects** [DJHGI19, DBR⁺20, MS11]. **Efficacy** [LBT20, RCS11, CMSP⁺19, LY21, ZNF⁺20]. **Effort** [RKM20]. **Electronic** [JK20, KLS⁺14]. **Elementary** [KCB⁺23, LIG22, VTB⁺20, YMZ⁺14]. **Elo** [VMAG22]. **Elo-rating** [VMAG22]. **Else** [MRG17, RP19]. **Emancipation** [EBC⁺21]. **Embodied** [MCK17, MC19]. **Emerging** [RB21]. **Emotions** [AL22]. **emphasizing** [IT13]. **Empirical** [AvdM21, GGT20, MFCLG19, MTGM21, Sho23, SS13]. **Empiricism** [HCSAz22]. **Employability** [IDC⁺19]. **Employers** [SWL⁺22]. **Enabling** [IDC⁺19, LG21]. **Encourage** [ETN⁺21]. **Endeavors** [CAL15]. **Engagement** [CDB⁺22, MBSBA09]. **Engaging** [KFME11]. **Engineering** [Akd23, AL22, BTF⁺19, CDK⁺14, CB19, DTT16, DJGIO20, FEC17, GVA22, Joh19, KFME11, MFR13, MPTV16, Mit14, Pet19, VMFG17]. **Engineers** [BCZ19, GGT20, MGM⁺23]. **Enjoyment** [ZD15]. **Enter** [LG21]. **Entering** [RB21]. **Enthusiasm** [Lar16]. **Entry** [TM11b]. **Environment** [ALP12, CDK⁺14, CDB⁺22, DMBP22, Köl10, LMGVS⁺16, MRR⁺10]. **Environments** [FU10b, GYSH19, GBB⁺17, IDC⁺19, Kie09, VFFT16]. **Epistemological** [Ros23]. **Equation** [LRJ14]. **Equations** [BKZL23]. **Equitable** [GYSH19]. **Equity** [FKG17, IKWR22, KFME11, VS22, WCPF20, ZCJR20]. **Equity-based** [VS22]. **Errors** [MK19, MFA23, PDF15, TSV18]. **Essential** [ZD15]. **Estimating** [BKZL23]. **Ethical** [HM22]. **Ethics** [HM22, MAHC⁺22, SSF⁺19]. **Evaluating** [VGRM19, WCPF20]. **Evaluation** [HCAT23, Joh19, KM16, KLM15, LFU23, PHP⁺22, RSPB17, Rit09, Shi16, Wan11, BC13, LY21]. **Evaluations** [UFVI09]. **Event** [LMH21]. **Event-driven** [LMH21]. **Everyday** [RvJP20]. **Evidence** [MR22, MGM⁺23]. **Evidence-Based** [MR22]. **Exacerbates** [Ros23]. **Examination** [Ip12, WK10]. **Examining** [DMBP22, JMN⁺22, RTE21, RHSS20, Zin15]. **Examples** [BNP11, MJC23]. **Executing** [SH18a]. **Execution** [BS10]. **Exemplars** [LMB⁺22]. **Exercise** [SGHZS19]. **Exercises** [DJHGI19, KJH19]. **Existing** [BF23]. **Expanding** [HM19]. **Expect** [GVA22]. **Experience** [FKG17, Har21, Pet19]. **Experienced** [AL22, ET12, RB22]. **Experiences** [Bar09, ECF18, KFME11, LRH⁺22, NAG⁺23, PG23, YBV23]. **Experiment** [Bol22, WX18]. **Experimental** [VI13]. **Expert** [MFA23]. **Experts** [GVA22, SDBJ19]. **Explain** [VMFG17]. **Exploration** [LZRO21, MPTV16]. **Exploring** [ET12, GM11, HM19, VS22, Vog21, SNG⁺22]. **Expository** [WSP⁺11]. **Extending** [KKNL21, MBSBA09]. **Extensive** [Wan11]. **External** [SBH⁺18]. **Eyes** [KDV22, MRG17]. **Fabrication** [RG19]. **Face** [MGM⁺23]. **Face-to-face** [MGM⁺23]. **Facilitate** [Mit14]. **Facilitating** [SSSC18]. **Factors** [DJGIO20, DBG⁺23, LRJ14, ZD15]. **Faculty** [Bar09, GMM17, LSHY22]. **Families** [MSV⁺23]. **Feedback** [HBVTN21, KSCP22, KJH19, ORS16]. **Female** [KWB20, LBT20]. **Fiction** [GM14]. **Field** [SCA⁺10]. **Final** [CGZ⁺20].

Final-year [CGZ⁺20]. **Findings** [MR22]. **Finnish** [KV15]. **First** [AL22, BHHMG21, CK09, NGK11, VCMV23]. **First-year** [AL22, VCMV23]. **Fit** [BBG12]. **Fitting** [Ip12]. **Fix** [Ber23]. **Flipped** [LSSM19]. **Flipping** [IT17]. **Focus** [Ric09]. **Following** [LMGVS⁺16]. **Forging** [LSHY22]. **Formal** [GEME14, LBT20]. **Formation** [Ric09]. **Formative** [HBVTN21, KSCP22]. **Formulation** [TSV18]. **Forum** [CHP⁺18]. **Forward** [RS14, TM15]. **FOSS** [BMB⁺18]. **Foundation** [CHH⁺11]. **Four** [TSAA⁺23]. **Fractal** [EKSW11]. **Fragile** [MW18]. **Framework** [AMD22, FEC17, GBB⁺17, LSSM19, MHP20, MAHC⁺22, MW22]. **Frances** [SPR12]. **free** [RMM21]. **French** [BDDGT14]. **friendly** [NCLN13]. **Fringe** [MW18]. **fsQCA** [PGJS17]. **Functional** [IT17]. **Future** [LSHY22, TS20].

Gains [PGJS17]. **Game** [DCW19, HHM19, LK19, McG12a, RWK⁺15, Rit09, TAL17, VGRM19, VGM⁺23, Wan11]. **Game-Based** [HHM19, TAL17]. **Games** [Ip12, WDC15, WDCT20]. **Gamification** [AZK⁺20, MFCLG19, MTGM21, RPT⁺22]. **Gap** [Akd23, LRVW14]. **Gaps** [GGT20, GVA22]. **Gender** [BVNN22, CHP⁺18, Har21, KFME11, KKNL21, RVSW23, RCS11, Wag16]. **Generalized** [BKZL23]. **Generalizing** [RVSW23]. **Generation** [BLNC09, CHU⁺09, EBC⁺21, KJH19]. **Generic** [SKM13]. **Genesis** [TC19]. **Georgia** [GEME14]. **Germany** [KMB⁺15]. **Get** [MS19]. **Getting** [OPC17]. **Girl** [OPC17]. **Girls** [ETN⁺21]. **GitHub** [HCAT23]. **Global** [BTF⁺19, CB19, FDW19, IDC⁺19, SGHZS19, VGRM19, VGM⁺23]. **Go** [DMBP22]. **Goals** [CHP⁺18, MS11, SPC19, Zin15]. **Google** [RSPB17]. **Governance** [GND19]. **GPU** [DSU20]. **Grade** [KKNL21, SA20, TWH18].

Grades [Zin15]. **Grading** [AvdM21]. **Graduate** [KG22]. **Graduates** [SWL⁺22]. **Grand** [TP23]. **Graphical** [SSB⁺23]. **Graphics** [She13]. **GRASP** [TSK12]. **Greater** [GML⁺23]. **Greedy** [VI13]. **Greek** [TAL17]. **Greenfoot** [Köl10, UCK⁺10]. **Grounded** [HM22, RP19]. **Group** [AvdM21, Ric09]. **Groups** [RBSS11]. **GSD** [VGRM19]. **GSD-Aware** [VGRM19]. **GSE** [HM19]. **Guest** [BB10]. **Guide** [SH18a]. **Guided** [NGK11]. **Guidelines** [TP23].

H [BMB⁺18]. **H/FOSS** [BMB⁺18]. **Hackathons** [Har21]. **Happens** [RMM21]. **Hard** [SPC19, WBK⁺22]. **Hardas** [DMBP22]. **Hardware** [BC12, LRVW14]. **hegemonic** [EBC⁺21]. **help** [HS13]. **Helping** [RT15]. **Heuristic** [KM16]. **High** [BSS20, CKSS21, DLM11, KLS⁺14, MFM⁺16, MSV⁺23, MSH10, Par23, TPQE18, WW17, WDK20, ZNF⁺20, ZCJR20, ZJWF11, AGEL13]. **High-Level** [TPQE18]. **high-performance** [AGEL13]. **Higher** [AMD22, CJS⁺17, GbGG⁺23, ILRD20, MSV⁺23]. **Hiring** [SWL⁺22]. **Hispanic** [GHT⁺11]. **Hispanic-Serving** [GHT⁺11]. **Hispanics** [GHT⁺11]. **Historical** [BDDGT14, LZRO21]. **History** [BCD10]. **Holistic** [NGK11]. **Home** [BBF⁺21]. **Hours** [PHRC21]. **HTML** [PDF15]. **Human** [KG22, RC13]. **human-centered** [RC13]. **Human-computer** [KG22]. **Hybrid** [LSSM19]. **Hypertext** [Kar09]. **Hypertextbook** [RV09]. **Hypothesis** [GBB⁺17]. **Hypothesis-Driven** [GBB⁺17].

i*CATch [NCLN13]. **ICT** [TSK12]. **IDE** [HOC17, OHR22]. **IDE-Based** [HOC17]. **Ideas** [SNOT21]. **Ideation** [LLF22, TBP21]. **Identification** [RJJ10]. **Identify** [LRJ14]. **Identifying** [AANK14, GVA22, LK19, WBK⁺22]. **Identity** [DMBP22, GbGG⁺23, JMN⁺22,

LRH⁺22, MHP20, RTE21]. **IEEE** [DTT16].
Impact [AZK⁺20, BCZ19, BJCS21, CDCCLK17, KG22, KA16, LK19, LY21, MJB⁺23, MDS16, MSV⁺23, PS21, PLB⁺12].
Impacts [MR22]. **Impairments** [LR11, vdMHVH23]. **Implement** [HAG15b].
Implementation [LMGVS⁺16, BC13]. **Implementing** [AGEL13, MMFR20].
Implications [Bur11, UR17, VSK22, HM22]. **Implicit** [FPSS23]. **Importance** [ECF18].
Improve [LFU23]. **Improved** [OHR22, TWH18]. **Improving** [IT17].
In-Classroom [MRG17]. **In-Code** [VMFG17]. **Incarceration** [SAyC⁺21].
Including [PLB⁺12]. **Inclusion** [IKWR22, LLF22]. **Inclusive** [GML⁺23].
Income [MSV⁺23]. **Incorporating** [SDBJ19]. **Increase** [CMSP⁺19]. **Increases** [RKM20]. **Incremental** [RKM20].
Incubators [LC21]. **Indian** [RVAN15].
Individual [HCAT23]. **Industry** [Akd23, Ip12, MAK12, MSP21]. **Ineffective** [RJJ10]. **Inequities** [Ros23]. **Influence** [DJGIO20]. **Influences** [McG12b].
Informal [CMSP⁺19, GEME14, LC21, SAyC⁺21].
Informatics [BLM⁺14, KS14]. **Information** [BF23, CHH⁺11, KKNL21, KPM18, MHP20, MAK12, RCS11, YBV23].
Informatively [WBK⁺22]. **Informed** [CMSP⁺19]. **ing** [DMBP22]. **Inheritance** [LBK11]. **Initial** [FU10b]. **Initiatives** [PS21]. **Injections** [TK16]. **Insights** [SPC19, TAL17]. **INSPIRED** [DLM11].
Institutional [BMB⁺18, LD19]. **Institutions** [CJS⁺17, GHT⁺11].
Instruction [LIG22, MJB⁺23, MW18, Shi16, LGP13].
Instructional [IKWR22, BC13]. **Instructor** [AWW15, SPC19]. **Instrument** [REB23]. **Instruments** [MSK⁺23].
Insufficient [KV15]. **Integrate** [KCB⁺23].
Integrated [RG19]. **Integrating** [CDK⁺14, HAA13, SSF⁺19, TK16].
Integration [BSY⁺10, KPM18].
Intelligence [AMD22, FPSS23, LGGS22].
Intent [DBG⁺23]. **Intention** [ZD15].
Intentions [DBR⁺20, SNG⁺22, TABA12].
Interaction [CHU⁺09, KG22, OHR22].
Interactions [MC19]. **Interactive** [BSY⁺10, HEE⁺19, JK20, TSK12].
Intercultural [AM21]. **Interest** [BJCS21, CMSP⁺19, DBR⁺20, MW22, OPC17, Zin15].
Interface [CG19]. **Internship** [KG22].
Internships [KG22, MSP21]. **Intersection** [RHSS20]. **Intersectionality** [LZRO21].
Intersections [Vog21]. **Intervening** [EK17]. **Intervention** [GEME14, RKM20].
Interventions [LK19, LY21, OHR22].
Interviews [AJNN20, JNA18, LSHY22].
Intro [MMFR20]. **Introduce** [EHPR⁺23].
Introducing [CG19, KLS⁺14, MFR13, TM09].
Introduction [BB10, BAR14, BAGM13, GM14, Gri13, Hub12, LRS21, LV11a, MC15, RB21, RSL22, SF19]. **Introductory** [BBG12, BNP11, CKSS21, GGH⁺10, KLM15, KA16, LY21, NAG⁺23, QL17, RB22, SKM13, TK16, WX18, Sor13].
Inventories [GGH⁺10]. **Inventory** [PHP⁺22]. **Investigate** [BKZL23].
Investigating [MS19, TSAA⁺23, ZD15].
Investigation [HSI⁺19, MFCLG19, SS13, Xin15].
Investigations [LGGS22]. **Involvement** [BBF⁺21]. **Involving** [SBH⁺18]. **Israel** [GES14]. **Issue** [CB19, FU10b, KG18, LV11a, LV11b, MT23, MC15, RB21, RSL22, BAGM13, Gri13].
Issues [CAL15, KKNL21, KDM⁺23].
Italian [BLM⁺14]. **Iteratively** [EK17].
Java [BNP11, BA17, BWTS⁺23]. **Job** [ECF18]. **Justice** [AM21, ETN⁺21, LRS21, RSL22].
Justice-Centered [LRS21, RSL22].
K-12 [BBSPK22, GYSH19]. **Keep** [PD22].

Keeping [Hun16]. **Kenya** [TSAA⁺23]. **Kingdom** [McG12a]. **kit** [NCLN13]. **Know** [SDBJ19]. **Know-how** [SDBJ19]. **Knowledge** [AJNN20, DTT16, DM23, ECF18, GGT20, JNA18, Sho23, TCK21, YB19]. **Korea** [CAL15].

Ladders [LD19]. **Landscape** [PE23]. **Language** [BWTS⁺23, KMW22, MRR⁺10, SPR12, SS13, Vog21, VCMV23]. **Languages** [KA16]. **Large** [BVNN22, BTF⁺19, BA17, SH18b]. **Large-Scale** [BA17]. **Latina** [ETN⁺21]. **Latino** [ZJWF11]. **Launching** [SF19]. **Leadership** [PS21]. **Learn** [GVA22, JNA18, LC21, MBE⁺16, PHRC21, RT15, TB16, ZD15, HS13]. **Learn-to-code** [LC21]. **Learned** [SWL⁺22]. **Learner** [Kie09]. **Learning** [AZK⁺20, AANK14, ALP12, BBG12, BS10, Bol22, BSY⁺10, CDK⁺14, CDB⁺22, CHP⁺18, DMBP22, DTT16, DJHGI19, Fie19, FU10b, FPSS23, GYSH19, GBB⁺17, GK17, HEE⁺19, HHM19, HOC17, IDC⁺19, Kie09, KG18, KA16, LLKH18, LMGVS⁺16, LZT⁺19, LBK11, LIG22, MSK⁺23, MRG17, MBE⁺16, MAHC⁺22, McG12b, MAK12, MS11, MS19, MBSBA09, O'G12, PCH09, PHRC21, RT15, RG19, RPT⁺22, RvJP20, RMM21, SSF⁺19, SSSC18, SF19, SPC19, SS23, TMSA22, TAL17, TB16, TPQE18, VI13, VFFT16, WDC15, YBV23, BC13]. **lecture** [Gri13]. **Led** [RLN⁺22, MAHC⁺22]. **Left** [PLB⁺12]. **LEGO** [SGHZS19]. **Lens** [Arm11]. **Lessons** [EHPR⁺23, OPC17, RSPB17]. **Let** [Ros23]. **Level** [TPQE18]. **Levels** [Lar16]. **Liberal** [BBD⁺10, BB10, BCD10, WK10]. **Libraries** [RLN⁺22]. **Life** [BBG12]. **Limited** [Rit09, Ros23]. **Limits** [LFU23]. **Lines** [ALHR17]. **Link** [MBR23]. **Linking** [OPC17]. **Literacy** [KKNL21, MW18]. **Literal** [MS19]. **Literature** [GbGG⁺23, HCSAz22, KJH19, LSTA22, PO20, QL17, Sha22]. **Load** [DZS22]. **Local** [BTF⁺19]. **Logic** [HLKZ12]. **Long** [LK19]. **Long-Term** [LK19]. **Longitudinal** [BCC⁺19, MAHC⁺22, OPC17, Pet19]. **Look** [MK19, OPC17, RS14, TM15]. **Looking** [Arm11, TM15]. **Low** [LZT⁺19]. **Low-performing** [LZT⁺19]. **Lower** [IIRY17, MSV⁺23].

Machine [BLNC09, Fie19, LMGVS⁺16, LZT⁺19, SSF⁺19, SF19, SPC19]. **Machines** [FU10a, MBR23, Sor13]. **Major** [LRJ14, MDS16, SNG⁺22, ZJWF11]. **Majority** [RBSS11]. **Majors** [AZK⁺20, RB22, SPC19, WDK20]. **Make** [HM22, MS11]. **Making** [CMSP20, RG19]. **Maladaptive** [FPSS23]. **man** [RMM21]. **Manager** [VGM⁺23]. **Managing** [BCC⁺19]. **Many** [HAG15b, ZPB13]. **many-core** [ZPB13]. **Mapping** [BSA⁺23, LMH21, TS20]. **MapReduce** [RRKP13]. **Materials** [vdMHVH23]. **Mathematical** [DHH⁺15]. **Matters** [TM10]. **Measurement** [DSUP20, KKNL21, WDCT20, RRKP13]. **Measures** [CHA17]. **Measuring** [GBB⁺17, Lar16, LBT20, WDC15]. **Medium** [She13]. **Medium-sized** [She13]. **Memoriam** [HAG15a]. **Mentoring** [MSH10]. **Merging** [Kar09]. **Meta** [DCW19, UR17]. **Meta-Analysis** [UR17]. **Meta-Synthesis** [DCW19]. **Metacognition** [LMB⁺22]. **Method** [AHL17, VI13, VFFT16]. **Methodology** [MSH10, SH18a]. **Methods** [FEC17, LLKH18, PO20, BC13]. **Middle** [DBR⁺20, FEC17, KO22b, MR22, OPC17, TABA12, WSP⁺11]. **Middle-School** [TABA12]. **Milestones** [SNOT21]. **Mindset** [RKM20]. **Mindsets** [FPSS22]. **Minecraft** [KO22b]. **Mirror** [LGGS22]. **Misconceptions** [QL17]. **Missing** [MBR23]. **Mistakes** [BA17]. **Mittermeir**

[HAG15a]. **MLeXAI** [RMNC10]. **Model** [BF23, BBF⁺21, BCD10, EHBA⁺23, HOC17, LMGVS⁺16, RVAN15, RMNC10, Shi16, SSB⁺23, WDCT20, CHM13]. **model-driven** [CHM13]. **Modeling** [Bol22, LRJ14, Mit14, SSB⁺23]. **Models** [BF23, Blu22, CHA17, MSK⁺23]. **Moderator** [RPT⁺22]. **MOOC** [CHP⁺18, KV15]. **Most** [EK17]. **Motivate** [BHHMG21]. **Motivated** [ASG19]. **Motivation** [MBE⁺16, McG12b, NGK11]. **Motivations** [CGZ⁺20]. **Move** [RS14]. **Multi** [BMB⁺18]. **Multi-Institutional** [BMB⁺18]. **Multilingual** [JMN⁺22, Vog21]. **Multimodal** [RG19]. **Multiple** [ASG19, CHU⁺09]. **Multiple-Choice** [ASG19]. **multipurpose** [NCLN13]. **Musicians** [Fie19]. **Myself** [MRG17].

National [KWB20, TM14]. **Need** [Ber23]. **Needed** [DM23]. **Needs** [Ip12]. **Network** [MW18]. **Networks** [PO20]. **Next** [KMW22, Ko22a]. **Nexus** [MAK12]. **Nigeria** [TSAA⁺23]. **No** [PLB⁺12]. **Non** [DJHGI19, GVA22, Har21, LBT20, SPC19, RB22]. **Non-Compulsory** [DJHGI19]. **Non-CS** [RB22]. **Non-Formal** [LBT20]. **Non-Majors** [SPC19]. **Non-Technical** [GVA22]. **Non-traditional** [Har21]. **nontraditional** [RC13]. **Normative** [Blu22]. **Norms** [HCSAz22]. **North** [KMB⁺15]. **North-Rhine** [KMB⁺15]. **Notional** [MBR23, Sor13]. **Novice** [ABCD20, BA17, BWTS⁺23, CG19, KM16, MK19, MS19, WSLR23, Xin15]. **Novices** [RT15]. **NZ** [BAR14].

Object

[AANK14, BS10, KKLL16, Shi16, Xin15].

Object-Oriented

[AANK14, BS10, KKLL16, Shi16, Xin15].

Objectives [PM09]. **Objects** [Xin15].

Offering [Par23]. **One** [KMW22]. **Online** [BBG12, DJHGI19, FKG17, HM21,

VMAG22, VFFT16]. **Open** [HM19]. **operating** [ZPB13]. **Opportunities** [CHH⁺11, PS21]. **Optimization** [SSD09]. **Orientation** [RCS11]. **Oriented** [AAGH14, AANK14, BS10, KLS⁺14, KKLL16, KDXB18, RMNC10, Shi16, Xin15, d'A10, AGEL13]. **Other** [Fie19, QL17]. **Outcome** [LLKH18]. **Outcomes** [AZK⁺20, OHR22, WX18]. **Outreach** [LK19, LBT20]. **Own** [MBE⁺16].

Pair [BJCS21, BWE11, UR17].

Pair-Programming [UR17]. **Paradigms**

[DSU20]. **Parallel** [DSUP20, BAGM13].

Parental [BBF⁺21, CMSP⁺19]. **Part**

[LV11a, LV11b, LRS21, RSL22]. **Partially**

[ORKH09]. **Participating** [FKG17].

Participation

[CHP⁺18, CHH⁺11, DDBR11, ETN⁺21, FKG17, KWB20, LV11a, LV11b, LZRO21, MPTV16, PG23, Pet19, Ros23].

Participatory [RLN⁺22]. **Partnership**

[EHPR⁺23]. **Pass** [SSD09]. **Path** [LSHY22].

Pathway [LD19]. **Pathways** [LK19].

PatternCoder [PCH09]. **Patterns**

[Bol22, PCH09]. **Pedagogical**

[EHBA⁺23, TSK12, VSK22, YB19, HAA13].

Pedagogy [BSS20, Ryo19, Zin15]. **Peer**

[HCAT23, ILRD20, MJB⁺23, MAHC⁺22,

TPQE18, LGP13]. **Peer-led** [MAHC⁺22].

Peers [BBSPK22]. **Penalties** [LFU23].

Pensarse [Vog21]. **People** [SNOT21].

Perceived [ZD15]. **Perception**

[AAGH14, vdMHVH23]. **Perceptions**

[AvdM21, Bar09, BJCS21, CMSP⁺19,

ECF18, MDS16, ZCJR20]. **Perceptual**

[CJS⁺17]. **Perfect** [MS11]. **Performance**

[DSUP20, DJHGI19, KWB20, LY21,

MTGM21, RKM20, Wag16, WZL⁺22, YB19,

AGEL13]. **Performative** [DMBP22].

performing [LZT⁺19]. **Persistence**

[BSA⁺23, CHP⁺18, WDK20]. **Personal**

[McG12b]. **Personalization** [BSY⁺10].

Perspective

[AWW15, BMB⁺18, LIG22, TM14, VSK22].
Perspectives [BDDGT14, HAGM14, IKWR22, KLS⁺14, MSV⁺23, MFA23, RB22, YZC19, TP23].
Phase [Shi16]. **Philosophical** [WK10].
Physical [RG19, NCLN13]. **Picture** [KWB20]. **Pilot** [EHPR⁺23]. **Plagiarism** [Alb20, CJS⁺17, KSCP22, MM12].
Planning [McG12a]. **Platforms** [MCK17].
Play [HHM19]. **Playing** [RPT⁺22].
POGIL [HS13]. **Point** [MS19, TWH18].
Points [GHT⁺11, TM11b]. **Policy** [GEME14]. **Polymorphism** [LBK11].
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Powerful [RvJP20]. **Practical** [O'G12].
Practice [CB19, EHPR⁺23, MR22, MS11, PE23, UR17]. **Practices** [ALHR17, KLS⁺14, KFME11]. **Practitioner** [MSV⁺23]. **Practitioners** [Fie19]. **Pre** [EKSW11, LR11, MDS16, RP19].
Pre-College [EKSW11, LR11, MDS16, RP19]. **Predict** [CHP⁺18, LZT⁺19, LRH⁺22]. **Predicting** [WDK20]. **Prediction** [LLKH18].
Predictive [CHA17]. **Predictors** [BKZL23, CKSS21]. **Preface** [FU10b].
Preparation [Arm11]. **Prescriptive** [Blu22]. **Present** [LSHY22].
Presuppositions [Ten14]. **Primary** [EHBA⁺23, HAGM14, IIRY17]. **Principles** [DHH⁺15, MJB⁺23, MMFR20, ORS16, SNG⁺22]. **Prior** [Sho23]. **Privacy** [TBP21].
Privilege [RTE21]. **Problem** [DTT16, Kie09, O'G12]. **Problem-Based** [DTT16, O'G12]. **Problem-Solving** [Kie09].
Problems [AANK14, Kie09, PE23].
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Professions [LG21]. **Profiles** [KPM18].
Program [DSS21, EHPR⁺23, HM21, KDV22, McG12b, RSPB17, RT15, RVI09, SKM13, UFVI09, HS13]. **Programadores** [Vog21]. **Programme** [LBT20].
Programmed [WDCT20]. **Programmer** [MK19, YZC19]. **Programmers** [ABCD20, CG19]. **Programming** [ASG19, AvdM21, Alb20, AAGH14, AANK14, AMSBA15, AL22, BJCS21, BWE11, BA17, BWTS⁺23, BSY⁺10, CHA17, CK09, DSUP20, DSU20, DCW19, FKG17, GBB⁺17, IT17, KKLL16, KMW22, KSCP22, KJH19, Köl10, KM16, KLM15, KA16, LLKH18, Lai22, LK19, LY21, LMB⁺22, LMH21, MRR⁺10, MMFR20, MFCLG19, MCK17, MC19, MS19, MJC23, NGK11, OHR22, PCH09, QL17, RKM20, RJJ10, RB22, RPT⁺22, RS14, SKM13, SS13, TAL17, UR17, VCMV23, VMAG22, WX18, WW17, WDC15, WHS⁺17, Xin15, YZC19, vdMHVH23, BAGM13, IT13, Sor13].
Programs [BBD⁺10, BSA⁺23, BS10, CMSP⁺19, DBG⁺23, McG12a, PG23, RBSS11].
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Psychometric [PHP⁺22]. **Public** [BVNN22]. **Purpose** [TMSA22].
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Qualitative [AL22, KG22, RB22, YR15].
Quality [BNP11]. **Quantitative** [KLM15].

Query [TSV18]. **Questions** [ASG19, HAG15b, Sho23, Ten14].

R1 [BVNN22]. **Race** [VS22]. **Racism** [VS22]. **Raise** [VGM⁺23]. **Randomized** [DSUP20, DSU20]. **Raspado** [RMM21]. **rating** [VMAG22]. **Re** [RVSW23, RB21]. **Re-Entering** [RB21]. **Re-Validating** [RVSW23]. **react** [IT13]. **Real** [AMSBA15, BHHMG21, LMGVS⁺16, TBP21]. **Real-World** [TBP21, BHHMG21]. **Reasoning** [DHH⁺15]. **Recognised** [DM23]. **Recommendation** [VMAG22]. **Reconfigurable** [SH10]. **Recruiting** [CMSP20]. **Recursion** [HEE⁺19]. **RecurTutor** [HEE⁺19]. **Redesign** [TSK12]. **Redesigning** [KKLL16]. **Reference** [MS19, MM12]. **Reference-Point** [MS19]. **Reflect** [PG23]. **Reflections** [ET12, Mal23]. **Reform** [GM11]. **Regarding** [TABA12]. **Regression** [LFU23]. **Regular** [GML⁺23]. **Regulation** [FPSS23, LMB⁺22]. **Rehabilitation** [NGK11]. **Related** [WDK20]. **Relation** [Ten23]. **Relationship** [FPSS23]. **Relationships** [RHSS20, SS23]. **Relevant** [KS14]. **Remotely** [MC19]. **Replications** [HSI⁺19]. **Reporting** [BVNN22, HCSAz22]. **Reports** [KG22]. **required** [IT13]. **Research** [BVNN22, Bar09, DCW19, DZS22, EHPR⁺23, GM14, GbGG⁺23, HSI⁺19, HB15, HCSAz22, HOC17, IT17, JK20, KCB⁺23, KFME11, LMGVS⁺16, MT23, MAK12, PM09, SSSC18, SF19, SS23, TS20, TP23, TM11b, Ten14, TM22]. **Research-Practice** [EHPR⁺23]. **Researcher** [Ten23]. **Researcher-Theory** [Ten23]. **Researchers** [MW22]. **Resources** [Rit09]. **Response** [LLF22]. **Responsible** [MAHC⁺22, RMM21]. **Responsive** [RG19]. **Restart** [BSCH14]. **Results** [AJNN20, JNA18]. **Resurgence** [BSCH14]. **Retaining** [HM21]. **Retention** [DBG⁺23]. **Reusing** [ABCD20]. **Review**

[Alb20, DZS22, GbGG⁺23, HCSAz22, HOC17, ILRD20, KJH19, LSTA22, LMH21, MJC23, NJK19, PLF22, PO20, QL17, Sha22, SKM13, TPQE18, YBV23]. **reviews** [HAA13]. **Rhine** [KMB⁺15]. **Rigorous** [HAG15b]. **Robot** [MC19]. **Robotics** [LR11, MCK17, WHS⁺17]. **Robots** [McG12b]. **Robust** [CHU⁺09, LZT⁺19, TCK21]. **Roland** [HAG15a]. **Role** [OWK21, PGJS17, RBSS11, SNG⁺22, TP23, IT13]. **Rubric** [WCPF20]. **Rules** [DSS21]. **Rural** [TMSA22]. **Russia** [KS14].

Sampler [JK20]. **Scaffolding** [RT15]. **Scalable** [RWK⁺15, SH18a]. **Scale** [BBF⁺21, BA17, RVSW23]. **Scenario** [AAGH14]. **Scenario-Based** [AAGH14]. **Scholarship** [TM10]. **School** [Ber23, BSS20, CKSS21, DLM11, DBR⁺20, EHPR⁺23, EHBA⁺23, GM11, IIRY17, JNA18, KLS⁺14, KS14, KO22b, MFM⁺16, MR22, MSH10, OPC17, RVSW23, RS14, TABA12, WW17, WDK20, WSP⁺11, ZNF⁺20, ZCJR20, ZJWF11]. **Schools** [BDDGT14, BAR14, BLM⁺14, BSCH14, FEC17, Hub12, HAGM14, HAG15b, KV15, MSV⁺23, Par23, RVAN15, RWK⁺15, TM14, TAL17]. **Science** [AZK⁺20, All23, Arm11, BVNN22, BBD⁺10, BB10, BDDGT14, BAR14, BSA⁺23, BHHMG21, BBG12, Ber23, Blu22, BJCS21, BWE11, BBF⁺21, BSCH14, BCD10, BSS20, CKSS21, CMSP⁺19, CMSP20, CHP⁺18, DJGIO20, DBR⁺20, EBC⁺21, EHPR⁺23, EHBA⁺23, FPSS22, GES14, GM14, GM11, GMM17, HM22, HHM19, Hub12, HAGM14, HAG15b, IIRY17, IKWR22, JMN⁺22, JK20, KWB20, KS14, KCB⁺23, KFME11, KMB⁺15, LK19, LLF22, LZRO21, LSHY22, LD19, MFM⁺16, MHP20, MRG17, MMFR20, MW18, MR22, MSV⁺23, NAG⁺23, PLF22, PGJS17, Par23, Pet19, PS21, RVAN15, RSPB17, RWK⁺15, REB23, RHSS20, RV09, Ryo19, SNG⁺22,

SA20, TK16, TB16, VMFG17, VFFT16, VSK22, Wag16, WK10, WW17, WDK20, YB19, YBV23, ZNF⁺20, ZCJR20, ZJWF11, Zin15, AGEL13, Gri13, LGP13]. **Science-** [WDK20]. **Sciences** [RCS11]. **Scientometric** [SNOT21]. **Scope** [GGH⁺10]. **Scratch** [AMSBA15, FKG17, MRR⁺10, UCK⁺10]. **Script** [Mod21]. **Script-based** [Mod21]. **Seamless** [Kar09]. **Searching** [IDC⁺19]. **Second** [KG18, MT23]. **Secondary** [Arm11, BDDGT14, BLM⁺14, Ber23, EHPR⁺23, Hub12, HAGM14, IIRY17, Kie09, MCK17, RVSW23, RvJP20, YMZ⁺14]. **Section** [LRS21, SF19]. **Sector** [All23]. **Secure** [TK16]. **Security** [BF23, LSSM19, TK16, YVQ⁺10, RC13]. **Seeing** [MRG17]. **Select** [ZJWF11]. **Self** [BVNN22, CMSP⁺19, FPSS23, Lar16, LY21, LMB⁺22, MBE⁺16, RCS11, VMFG17, ZNF⁺20, IT13]. **Self-assessed** [Lar16]. **Self-Directed** [MBE⁺16]. **self-direction** [IT13]. **Self-Efficacy** [RCS11, CMSP⁺19, LY21, ZNF⁺20]. **Self-evaluation** [LY21]. **Self-Explain** [VMFG17]. **Self-Regulation** [FPSS23, LMB⁺22]. **Self-study** [BVNN22]. **Serious** [VGRM19, VGM⁺23]. **Service** [YBV23]. **Serving** [GHT⁺11, MSV⁺23]. **Setbacks** [LD19]. **Setting** [FDW19, GGH⁺10, VS22]. **Setup** [AvdM21]. **Shifting** [FPSS22]. **Shifts** [LZRO21]. **Short** [LK19, LBT20]. **Short-Term** [LK19, LBT20]. **Should** [JNA18, RP19]. **Similarity** [NJK19]. **Simulation** [RWK⁺15]. **Simulations** [EKSW11]. **Singleton** [She13]. **Situation** [RVAN15]. **Situations** [HM22]. **sized** [She13]. **Sketch** [BL14]. **Sketch-Based** [BL14]. **Skill** [GVA22, Lar16]. **Skills** [Akd23, AJNN20, ECF18, JNA18, MGM⁺23, YR15]. **Small** [BTF⁺19, RvJP20, She13]. **Smarter** [GML⁺23]. **Smartphones** [RT15]. **Snapshot** [ALHR17]. **Social** [CHA17, KPM18, LRJ14, OHR22, RHSS20, RCS11, TC19]. **Socially** [RMM21]. **Society** [RMM21]. **Sociocultural** [VSK22]. **Software** [ALHR17, Akd23, BTF⁺19, BCZ19, BCC⁺19, CDK⁺14, CDCLK17, CDB⁺22, CB19, DTT16, DHH⁺15, FEC17, GGT20, GVA22, HM19, HCAT23, Joh19, KDXB18, LRVW14, MPTV16, MSH10, Mit14, MGM⁺23, MBSBA09, VGRM19, VGM⁺23, Wan11]. **Solution** [MM12]. **Solving** [Kie09]. **Some** [HAG15b]. **Someone** [MRG17]. **Sophistication** [WDCT20]. **Source** [ABCD20, CJS⁺17, HM19, NJK19]. **Source-Code** [CJS⁺17, NJK19]. **South** [CJS⁺17]. **Spanish** [VCMV23]. **Spanish-language** [VCMV23]. **Speak** [RTE21]. **Special** [CB19, FU10b, KDM⁺23, KG18, LRS21, LV11a, LV11b, MT23, MC15, RB21, RSL22, SF19, BAGM13, Gri13]. **Specialized** [AJNN20]. **specific** [MSK⁺23]. **SQL** [BSY⁺10, MFA23, MTGM21, TSV18, TS20]. **Stakeholders** [SBH⁺18]. **STARS** [DBBR11]. **State** [GND19, GEME14, PLF22, RB21, SCA⁺10]. **State-of-the-Art** [PLF22]. **States** [GES14, LSHY22, McG12a]. **STEAM** [MFM⁺16]. **STEAM-Based** [MFM⁺16]. **STEM** [HM21]. **Steps** [Ko22a]. **Stereotypes** [DBR⁺20]. **Stitch** [JK20]. **Story** [ZJWF11]. **Strategies** [CDB⁺22, DBBR11, Kie09]. **Strategy** [RWK⁺15, WDC15]. **STREAM** [CK09]. **Structural** [LRJ14]. **Structure** [CHU⁺09, LMGVS⁺16]. **Structures** [BL14, Par23, WZL⁺22]. **Struggling** [PD22]. **Student** [AvdM21, Bar09, BJCS21, BBSPK22, BSS20, CHA17, DSUP20, DJHGI19, FPSS22, FDW19, GMM17, HLKZ12, JMN⁺22, KA16, KO22b, LFU23, LLF22, MPTV16, McG12b, MDS16, MFA23, MTGM21, NAG⁺23, PGJS17, PD22, Pet19, PS21, PLB⁺12, QL17,

RVSW23, RP19, RvJP20, SH18a, SNG⁺22, TABA12, VTB⁺20, VFFT16, WX18, WZL⁺22, YR15, ZD15]. **Student-Centered** [NAG⁺23]. **Student-Directedness** [BBSPK22]. **Students** [ASG19, AL22, BSA⁺23, BHHMG21, CJS⁺17, GML⁺23, GVA22, HM22, HM21, IIRY17, IDC⁺19, JNA18, KG22, KSCP22, KPM18, LZT⁺19, LR11, MBE⁺16, MSV⁺23, MSP21, ORKH09, ORS16, Pet19, RJJ10, SDBJ19, Sho23, SA20, TB16, VCMV23, Vog21, ZJWF11, HS13, IT13, YZC19]. **Studies** [BBD⁺10, LSSM19]. **Studio** [BTF⁺19, RT15]. **Studio-Based** [RT15]. **Study** [AvdM21, AL22, BAR14, BSA⁺23, BCC⁺19, DMBP22, GND19, GM11, HM22, KCB⁺23, KMB⁺15, LSTA22, MAHC⁺22, MGM⁺23, MTGM21, Par23, Pet19, RB22, Rit09, RvJP20, SNOT21, Sho23, TS20, VS22, WSLR23, YR15, Zin15, BVNN22]. **Styles** [TAL17]. **Subgoals** [MMFR20]. **Subject** [Hub12, KS14]. **Subjects** [GGH⁺10]. **Submission** [LFU23]. **Success** [BSS20, CKSS21, RPT⁺22, ZJWF11]. **Successes** [GES14]. **Successful** [UFVI09]. **Support** [ABCD20, BBSPK22, CMSP⁺19, GBB⁺17, PCH09, RCS11]. **Supported** [CDK⁺14, CDCLK17, MW18]. **Supporting** [ALP12, GHT⁺11]. **Supports** [Par23, Ryo19]. **Survey** [GMM17, REB23, UFVI09]. **SWEBOK** [GGT20]. **Syntax** [PDF15, SS13]. **Synthesis** [DCW19, JK20, d'A10]. **Synthesis-Oriented** [d'A10]. **system** [ZPB13]. **Systematic** [Alb20, BSA⁺23, GbGG⁺23, HSI⁺19, HCSAz22, KJH19, LSTA22, NJK19, TS20, YBV23]. **Systemic** [RWK⁺15]. **Systems** [KM16, LFU23, LC21, PS21, RG19, SKM13, TSK12, UFVI09].

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[AAGH14, vdMHVH23]. **Usability-Oriented** [AAGH14]. **Use** [ASG19, BWTS⁺23, LMB⁺22, LR11, MSK⁺23, Sho23, SS23, VMAG22]. **Used** [NJK19]. **User** [PLB⁺12]. **Using** [CMSP⁺19, CDCLK17, DTT16, FEC17, GBB⁺17, HS13, JK20, Kie09, LMGVS⁺16, LLF22, LSSM19, MT23, Mit14, RRP13, TM22, Wan11, DSUP20, RVAN15, RC13]. **Utilize** [BBSPK22]. **Utilizing** [LRJ14]. **UX** [KG22].

Validating [RVSW23]. **Validation** [REB23, VCMV23]. **Value** [EBC⁺21, MRG17, MSP21]. **Valued** [NCW22]. **Values** [FDW19, PM09]. **Variation** [RVSW23, TB16]. **Veces** [Vog21]. **Version** [VCMV23]. **VHDL** [d'A10]. **via** [KSCP22]. **Viable** [DBBR11]. **Video** [MGM⁺23]. **Video-based** [MGM⁺23]. **Views** [BKZL23, GYSH19, TABA12]. **Virtual** [WHS⁺17]. **Vision** [HB15]. **Visions** [HAGM14]. **Visual** [BS10, LR11, vdMHVH23]. **Visualization** [MBSBA09, RVI09, RV09, SSD09, SCA⁺10, SKM13, UFVI09, YVQ⁺10]. **Visualization-Based** [RV09]. **Visualizations** [CHU⁺09]. **Visualizing** [BL14]. **vs** [BA17, WX18].

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Workshops [PHRC21]. **World** [TBP21, BHHMG21]. **WReSTT** [CDCLK17]. **Writing** [VMFG17, WSP⁺11].

year [AL22, CGZ⁺20, MGM⁺23, VCMV23]. [AGEL13]
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