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From Awareness To Action: The Role Of Professional Development In Bridging The Global Competence Implementation Gap

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ABSTRACT

Educational systems worldwide recognize the importance of global competence for 21st-century learners, yet implementation remains inconsistent. This study examined factors influencing global competence implementation among 156 elementary school teachers in Be'er Sheba, Israel, a city with significant socioeconomic diversity. Using the OECD (2018) Global Competence Framework, we investigated the relationship between school context (measured by the Cultivation Index), teacher characteristics (seniority and education level), and support mechanisms (professional development and pedagogical diversity). Contrary to expectations, teachers in schools facing greater socioeconomic challenges demonstrated significant awareness of global competence importance ($r = .178$, $p < .05$). However, traditional markers of teacher quality seniority ($r = -.183$, $p < .05$) and advanced degrees ($r = -.231$, $p < .05$) showed weak negative correlations with implementation. The strongest predictors were professional development ($r = .372$, $p < .05$) and pedagogical diversity ($r = .512$, $p < .05$), suggesting that the key to bridging the awareness-action gap lies not in who teachers are, but in how they are supported. This study offers evidence-based recommendations for educational policy focused on building implementation capacity through sustained, collaborative professional learning.

Keywords: global competence, professional development, teacher education, educational equity, implementation gap.

1. INTRODUCTION

The 21st century presents educational systems with a dual mandate: addressing persistent achievement gaps while simultaneously preparing students with the global competencies necessary for an interconnected world (Banks, 2015; OECD, 2018). Global competence defined by the OECD (2018) as the capacity to examine local, global, and cultural issues, understand and appreciate diverse perspectives, engage in open, appropriate, and effective cross-cultural communication, and take action for collective well-being and sustainable development—has emerged as a critical educational priority. Yet despite widespread policy commitment to these skills, implementation in classrooms remains inconsistent and uneven (Boix-Mansilla & Jackson, 2011; Reimers, 2020).

This implementation gap is particularly pronounced in socioeconomically diverse contexts, where schools face the challenge of addressing basic academic needs while cultivating higher-order competencies (Ayalon, Blass, Feniger, & Shavit, 2019). In Israel, the Ministry of Education employs a specific metric the Cultivation Index to measure schools' socioeconomic disadvantage and allocate resources accordingly. A higher index indicates greater disadvantage and theoretically more resource allocation to bridge achievement gaps. This raises a critical question: Can schools facing socioeconomic challenges also focus on global competence, or must they prioritize basic skills at the expense of 21st-century competencies?

The conventional wisdom suggests that disadvantaged schools lack the capacity for innovative pedagogies, that veteran teachers possess superior implementation skills, and that advanced academic degrees translate to better practice. However, recent research on teacher professional capital (Hargreaves & Fullan, 2012) and effective professional development (Darling-Hammond, Hyler, & Gardner, 2017) challenges these assumptions, suggesting that implementation success depends less on static teacher characteristics and more on dynamic support mechanisms.

This study investigates the factors that enable or constrain teachers' translation of global competence awareness into classroom practice.

Specifically, we examine: (1) How does school socioeconomic context relate to teachers' global competence implementation? (2) What role do teacher characteristics seniority and education level play in implementation? (3) How do professional support mechanisms professional development participation and pedagogical diversity influence implementation?

By examining these questions in the context of Be'er Sheba, Israel, a city characterized by significant socioeconomic diversity within its school system, this study contributes to our understanding of how to bridge the gap between policy intentions and classroom reality. The findings have implications not only for Israeli education but for educational systems worldwide grappling with the challenge of implementing complex competencies in diverse school contexts.

2. THEORETICAL FRAMEWORK

2.1 The Awareness-Action Gap in Educational Innovation

The gap between teachers' awareness of pedagogical innovations and their actual implementation has been well documented in educational research (Fullan, 2007). Teachers may recognize the importance of new approaches whether technology integration, differentiated instruction, or global competence yet struggle to translate this awareness into consistent classroom practice. This phenomenon reflects what Argyris and Schön (1974) termed the distinction between "espoused theory" (what educators say they value) and "theory-in-use" (what actually guides their practice).

Bridging this gap requires more than knowledge transmission; it demands ongoing support, practical tools, and opportunities for collaborative learning (Darling-Hammond et al., 2017). Implementation science suggests that successful adoption of educational innovations depends on multiple factors operating at individual, organizational, and systemic levels (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

2.2 Professional Capital and Teacher Development

Hargreaves and Fullan's (2012) framework of professional capital distinguishes three forms of capital that contribute to teaching quality: human capital (individual knowledge and skills), social capital (collaborative resources and relationships), and decisional capital (capacity for professional judgment developed through experience). Traditional approaches to teacher quality focus primarily on human capital—measured through credentials, experience, and individual professional development. However, Hargreaves and Fullan argue that social capital and decisional capital are equally or more important for sustained improvement.

This framework suggests that neither seniority (a crude proxy for decisional capital) nor advanced degrees (a measure of human capital) alone guarantee effective implementation of complex pedagogies. Rather, implementation capacity develops through sustained, collaborative professional learning that builds all three forms of capital simultaneously.

2.3 Pedagogical Diversity and Global Competence

Global competence implementation requires specific pedagogical approaches that differ from traditional transmission models of teaching (Boix-Mansilla & Jackson, 2011). These include project-based learning, which engages students in sustained inquiry around complex, authentic problems; cooperative learning, which develops collaborative skills and perspective-taking; and accountable talk, which fosters the reasoning and communication skills essential for global dialogue (Zhao, 2010).

Teachers' implementation of global competence thus depends partly on their pedagogical repertoire—their capacity to employ diverse teaching methods appropriate to the goals of global learning. This pedagogical diversity represents not merely technical skill but a fundamental orientation toward student-centered, inquiry-based instruction (Banks, 2015).

Recent research on learning and transfer suggests that global competence does not develop through exposure to content alone, but through pedagogies that promote deep learning and knowledge transfer across contexts. Deep learning occurs when students actively construct meaning, engage in metacognitive regulation, and apply knowledge to authentic, varied problems (National Research Council, 2012; Fortus, 2011; Klein, 2011).

Studies demonstrate that inquiry-based learning, collaborative learning, and problem-

based learning support the development of higher-order thinking and transfer when learning objectives focus on application, long-term understanding, and metacognitive control rather than short-term factual recall (Strobel & Van Barneveld, 2009; Mercer, 2010).

Therefore, pedagogical diversity functions not merely as a set of teaching techniques but as a cognitive infrastructure that enables students to develop the kinds of transferable, reflective, and intercultural competencies required for global citizenship.

2.4 Context and Capacity: Rethinking Deficit Assumptions

Educational research has historically viewed socioeconomically disadvantaged schools through a deficit lens, assuming limited capacity for innovative practice (Valencia, 2010; Anyon, 1980). However, more recent scholarship challenges this assumption, documenting instances where challenging contexts generate heightened teacher commitment to equity-oriented pedagogies (Reimers, 2020). Teachers in disadvantaged schools may recognize global competencies as essential tools for their students' social mobility and civic participation, viewing these skills not as luxuries but as necessities.

This asset-based perspective suggests that the challenge facing disadvantaged schools is not lack of awareness or motivation but insufficient support structures to translate commitment into practice. The question becomes not whether these schools can implement global competence but what resources and support would enable them to do so effectively.

3. METHODOLOGY

3.1 Research Context

This study was conducted in Be'er Sheba, the largest city in southern Israel and an educational context characterized by significant socioeconomic diversity. The city serves as a regional hub for both established urban populations and newer immigrant communities, creating a heterogeneous school system. Schools in Be'er Sheba range from those serving predominantly middle-class families to those in neighborhoods facing substantial economic challenges, making the city an ideal context for examining the relationship between school socioeconomic context and pedagogical innovation.

The Israeli Ministry of Education's Cultivation Index provides a standardized measure of school-level socioeconomic disadvantage, calculated based on parental education levels, income indicators, geographic peripherality, and immigration status. The index ranges from 1 (least disadvantaged) to 10 (most disadvantaged), with higher scores triggering additional resource allocations (Ben David-Hadar, 2023). For this study, participating schools ranged from Cultivation Index 4 to 9, representing substantial socioeconomic diversity within the city's elementary education system.

3.2 Participants

The study sample comprised 156 elementary school teachers from 18 public schools in Be'er Sheba. Teachers were recruited through municipal education department coordination, with voluntary participation. The response rate was 55.7%.

Sample characteristics: The majority of participants were female (96.8%), reflecting the gender distribution in Israeli elementary education (CBS, 2020). Teachers had an average of 14.9 years of teaching experience (SD = 10.6) and had worked at their current school for an average of 8.8 years (SD = 8.1). They taught classes averaging 28.65 students (range: 22–36).

Schools in the sample had a mean cultivation index of 6.8 (SD = 1.12, range: 4–9), indicating that most served populations facing considerable socioeconomic challenges. The 18 schools represented diverse socioeconomic contexts across Be'er Sheba, allowing for examination of implementation patterns across the socioeconomic spectrum.

Education levels included bachelor's degrees (77.0%), master's degrees (21.8%), and doctoral degrees (1.3%). The majority (91.0%) had participated in professional development within the past two years, with 42.9% having engaged in global competence-specific training.

Rationale for site selection: Be'er Sheba was selected due to its socioeconomic diversity, regional significance as a peripheral city, and administrative accessibility. Findings are therefore context-specific and may not generalize to central urban areas, high-SES communities, or non-Hebrew-speaking sectors.

3.3 Instrument

We developed a 45-item questionnaire to assess global competence implementation, based on the OECD (2018) Global Competence Framework. The instrument measured four dimensions:

1. **Examining local, global, and cultural issues** (12 items): To what extent do teachers engage students in analyzing contemporary issues from multiple perspectives?
2. **Understanding and appreciating diverse perspectives** (10 items): To what extent do teachers cultivate students' capacity to understand viewpoints different from their own?
3. **Engaging in open, appropriate, and effective cross-cultural interactions** (9 items): To what extent do teachers develop students' intercultural communication skills?
4. **Taking action for collective well-being and sustainable development** (8 items): To what extent do teachers engage students in civic action and responsibility?

Additional sections assessed professional development participation (3 items), pedagogical diversity (3 items), and demographic variables.

Development process: Items were generated through a comprehensive literature review and subsequently refined by an expert panel (n = 7) to ensure content validity. All items used a 6-point Likert scale (1 = Strongly Disagree to 6 = Strongly Agree).

Psychometric properties: Internal consistency was excellent for the total scale (Cronbach's α = .94) and good for subscales (α = .83–.89). Exploratory factor analysis (Principal Axis Factoring, Promax rotation) confirmed the four-dimension structure, with KMO = .92 and four factors explaining 63.4% of variance. All items loaded ≥ .40 on their intended factors.

We obtained the cultivation index from official Ministry of Education records. This composite indicator (range: 1–10) reflects parental education, income, geographic peripherality, and immigration status, with higher scores indicating greater socioeconomic disadvantage (Ben David-Hadar, 2023).

3.4 Variables

The study analyzed relationships between one dependent variable and several independent variables. The Dependent Variable was the Global Competence Implementation Score, defined as a composite measure of teaching practices across the four OECD dimensions (continuous variable, range: 1–6).

The Independent Variables included: (1) School Cultivation Index, representing the socioeconomic disadvantage level (continuous variable, range: 4–9 in this sample); (2) Teacher Seniority, measured by years of teaching experience; (3) Teacher Education Level, categorized by the highest degree attained (1 = Bachelor's, 2 = Master's or higher, 3 = Doctoral); (4) Professional Development Participation, reflecting self-reported engagement in structured, ongoing training focused on global education in the past two years; and (5) Pedagogical Diversity, a composite measure of the self-reported use of varied teaching methods, such as project-based learning, cooperative learning structures, and accountable talk practices.

3.5 Data Analysis

We conducted Spearman's rank-order correlations (rs) to examine relationships between variables, given non-normal distributions. Significance was set at α = .05 (two-tailed). Factor analysis validated the instrument's structure. We conducted all analyses in SPSS Version 28.0 (updated to match current standards).

4. FINDINGS

4.1 Descriptive Statistics

Across the sample, teachers reported moderately high levels of global competence implementation (M = 4.68, SD = 0.85 on the 1-6 scale), suggesting that these practices are present and relatively well-integrated into instruction, though with room for further development. Implementation scores showed substantial variation both within and across schools, indicating that individual teacher factors and support mechanisms, rather than school context alone, influence practice.

Specifically, mean scores across dimensions ranged from M = 4.44 (Examining Issues) to M = 4.73 (Understanding Perspectives), all above the scale midpoint of 3.5, indicating generally positive implementation patterns.

4.2 School Context: Beyond Deficit Assumptions

Contrary to our initial hypothesis that teachers in disadvantaged schools would report lower

implementation due to resource constraints and focus on basic skills, we found a weak but statistically significant positive correlation between school Cultivation Index and global competence implementation ($r_s = .178$, $p < .05$).

More specifically, positive relationships were found between the Cultivation Index and teachers' ability to promote critical thinking on global issues (Dimension 1, $r_s = .159$, $p = .048$) and understanding diverse perspectives (Dimension 2, $r_s = .237$, $p = .003$).

This finding challenges deficit-oriented assumptions about disadvantaged schools. Teachers in schools facing greater socioeconomic challenges demonstrated awareness of and commitment to global competence as an educational priority. Qualitatively, this pattern may reflect what Reimers (2020) describes as an "asset mindset": teachers in challenging contexts recognizing that global competencies are not luxuries but essential tools for their students' futures (Reimers, 2020; Banks, 2015; Merryfield, 2008)."

However, the weak magnitude of this correlation ($r_s = .178$) suggests that while awareness and intent may be present, actual implementation capacity requires additional support. High awareness in disadvantaged schools does not automatically translate to high implementation without appropriate resources and professional development.

4.3 Teacher Characteristics: Experience and Education Are Not Sufficient

Two findings challenged conventional assumptions about teacher quality and pedagogical innovation:

Seniority showed a weak negative correlation with global competence implementation ($r_s = -.183$, $p < .05$). More specifically, as years of teaching experience increased, the tendency to integrate global competence practices slightly decreased, particularly in examining global issues (Dimension 1, $r_s = -.197$, $p = .015$) and engaging in intercultural interactions (Dimension 3, $r_s = -.175$, $p = .031$).

This counterintuitive finding contradicts the common assumption that experience automatically translates to better practice, particularly in emerging pedagogical areas. Veteran teachers' established routines and pedagogical habits may actually create implementation barriers when new approaches require fundamental shifts in instructional design.

Teacher education level also showed a weak negative correlation ($r_s = -.231$, $p < .05$). More specifically, a significant negative correlation was found between higher formal education levels and collaboration in teaching global competencies ($r_s = -.263$, $p < .001$). Teachers with Master's or Doctoral degrees reported slightly lower implementation than those with Bachelor's degrees alone.

This suggests a potential gap between theoretical academic training which teachers receive in graduate programs—and practical classroom implementation of global competencies. Advanced degrees may emphasize research and theory without providing the practical pedagogical tools necessary for translating those ideas into instruction.

These findings echo Hargreaves and Fullan's (2012) argument that human capital alone measured through credentials and experience does not guarantee effective practice. Something beyond static teacher characteristics determines implementation success.

4.4 Professional Support: The Real Drivers of Implementation

Two variables emerged as strong positive predictors of global competence implementation:

Professional development participation showed a moderate positive correlation ($r_s = .372$, $p < .05$). More specifically, teachers who engaged in structured, continuous, and collaborative professional development focused on global education or related pedagogies showed greater engagement in promoting cultural understanding ($r_s = .384$, $p < .001$), developing intercultural communication skills ($r_s = .325$, $p < .001$), and encouraging critical thinking on global issues ($r_s = .298$, $p < .01$).

This finding aligns with research on effective professional development (Darling-Hammond et al., 2017), which emphasizes that meaningful teacher learning requires sustained engagement, opportunities for practice, and collegial support—not isolated workshop attendance.

Pedagogical diversity showed the strongest positive correlation ($r_s = .512$, $p < .05$) with global competence implementation. More specifically, a significant positive correlation ($r_s = .538$, $p < .001$) was found between diverse

teaching approaches focusing on cultural differences and "understanding and appreciating the perspectives and worldviews of others" (Dimension 2).

Teachers who regularly employed varied instructional methods particularly project-based learning, cooperative learning structures, and accountable talk practices were substantially more likely to integrate global competence into their teaching. This finding suggests that global competence implementation is not an isolated skill set but part of a broader pedagogical orientation toward student-centered, inquiry-based instruction.

The strength of these correlations, particularly for pedagogical diversity, indicates that these are not merely associated factors but likely mechanisms through which implementation capacity develops. Professional development provides the knowledge, tools, and collegial support necessary for trying new approaches, while pedagogical diversity reflects the practical repertoire that makes consistent implementation possible.

4.5 Summary: A Clear Pattern Emerges

When we examine all five correlations together, a clear pattern emerges:

Variable	Correlation with GC Implementation	Interpretation
Pedagogical Diversity	rs = .512*	**Strongest positive**
Professional Development	rs = .372*	**Strong positive**
Cultivation Index	rs = .178*	**Weak positive**
Teacher Education	rs = -.231*	**Weak negative**
Teacher Seniority	rs = -.183*	**Weak negative**

Note: * $p < .05$

The strongest predictors of implementation success are dynamic and support-based (pedagogical diversity and professional development), while static teacher characteristics (seniority and education level) show weak or negative associations. School context, while positively related to awareness, does not determine implementation capacity.

This pattern suggests a fundamental principle: Success is determined largely by how we support teachers, rather than by their static professional characteristics, such as seniority or academic degree. Implementation capacity is built through active support, not simply acquired with tenure.

5. DISCUSSION

5.1 Understanding the Awareness-Action Gap

The positive correlation between school disadvantage and global competence awareness, coupled with the strong role of professional support mechanisms, illuminates the nature of the awareness-action gap. The problem facing many schools particularly those serving disadvantaged communities is not lack of recognition that global competence matters. Teachers understand that in an interconnected world, their students need skills in perspective-taking, intercultural communication, and global problem-solving.

The problem is insufficient support to translate awareness into practice. Knowing that global competence is important does not automatically provide teachers with the pedagogical tools, curricular resources, time, or collegial support necessary to implement it consistently. This is particularly true for competencies like global education that require departures from traditional instruction and sustained inquiry approaches.

Bridging the awareness-action gap thus requires not motivational appeals or policy mandates but practical implementation support: professional development that provides concrete pedagogical strategies, collaborative structures that allow teachers to learn from one another, curriculum resources that make global themes accessible, and time within the school day to enact inquiry-based approaches.

5.2 Rethinking Teacher "Readiness" for Innovation

The negative correlations for seniority and education level challenge deficit narratives that blame implementation gaps on teacher quality. The issue is not that veteran teachers or those

with advanced degrees are poor teachers; rather, these characteristics alone do not predict capacity for pedagogical innovation.

Veteran teachers bring valuable decisional capital professional judgment developed through years of experience (Hargreaves & Fullan, 2012). However, when innovations like global competence require substantially different instructional approaches, experience with traditional methods may not readily transfer. In fact, established routines may create implementation barriers. As Fullan (2007) notes, change is often hardest for those most invested in current practice. Research suggests that veteran teachers may face greater difficulty adopting innovative approaches without sufficient training (Hargreaves, 2005) and may experience burnout after many years in the profession (Skaalvik & Skaalvik, 2010).

Similarly, advanced degrees provide theoretical knowledge and research sophistication but may not equip teachers with practical pedagogical tools for implementing complex competencies. Graduate education in many contexts remains disconnected from the realities of classroom practice (Darling-Hammond et al., 2017; Zeichner & Liston, 2013). Teachers may complete master's programs without ever experiencing or practicing the kinds of inquiry-based, student-centered instruction that global competence requires. Teachers with advanced degrees may also specialize more deeply in specific subject areas and devote less attention to cross-cutting skills such as global competencies (Zhao, 2010).

These findings suggest that effective innovation support must address veteran and highly-credentialed teachers' specific needs. Rather than assuming these teachers will lead innovation automatically, schools and systems should provide targeted professional development that helps experienced educators adapt their pedagogical repertoires and intergenerational mentoring structures where both newer and veteran teachers learn from one another (Day & Gu, 2009).

5.3 The Power of Pedagogical Diversity

The exceptionally strong correlation between pedagogical diversity and global competence implementation ($r_s = .512$, $p < .001$) reveals a critical insight: global competence is not content to be added but capacity to be developed through how we teach.

Teachers employing project-based learning naturally create contexts requiring multiperspectival analysis of complex problems a core global competence. Those structuring cooperative learning provide authentic practice in perspective-taking and collaborative problem-solving across difference. Those facilitating accountable talk develop students' capacity for reasoned cross-cultural dialogue (Boix-Mansilla & Jackson, 2011). These pedagogies don't merely support global competence; they embody it.

The relationship is mutually reinforcing: diverse pedagogical repertoires provide the practical means for implementing global competence, while attention to global learning offers authentic purposes for employing varied instructional approaches. This creates a developmental cycle where pedagogical capacity and global competence grow together. For professional development, this suggests integration rather than addition. Rather than treating global competence as separate training content, professional development might more effectively embed global themes within instruction on evidence-based pedagogies like project-based and cooperative learning. This approach builds pedagogical capacity while advancing global competence simultaneously-what Banks (2015) and Gay (2018) describe as culturally responsive pedagogy that develops intercultural capability through instructional diversity.

Concerns about inquiry-based pedagogies deserve attention. Meta-analyses (Hattie, 2009) report modest short-term effects for problem-based learning compared to direct instruction. However, these findings depend on what we measure. For immediate factual recall, direct instruction shows advantages. For long-term retention, knowledge transfer, and application to novel contexts the very goals of global competence inquiry-based approaches prove superior (Strobel & Van Barneveld, 2009; National Research Council, 2012).

Global competence is inherently a transferable, context-sensitive capacity rather than discrete knowledge. Pedagogical diversity aligns theoretically and empirically with this nature. The strongest path to global competence may lie not in adding new content but in teaching existing content through pedagogies that inherently develop global capabilities.

5.4 The Asset Mindset in Disadvantaged Schools

Perhaps the most surprising finding of this study is the positive correlation between school disadvantage and teachers' global competence implementation. This challenges pervasive deficit assumptions that frame disadvantaged schools as incapable of innovative practice (Valencia, 2010; Anyon, 1980; Thrupp, 1999).

One interpretation is that teachers in challenging contexts hold an asset mindset regarding their students. Rather than viewing global competence as irrelevant to students facing immediate economic hardships, these teachers may recognize that global skills critical thinking, communication, intercultural competence are precisely what their students need to navigate an increasingly complex world and access economic opportunity. As Reimers (2020) notes, teachers in schools with high cultivation indices may view the development of global competencies as a means of providing their students with equal opportunities and reducing educational gaps.

This finding aligns with recent shifts in Israeli educational policy, particularly the "fairness" concept promoted by the Elementary Education Department of the Ministry of Education (Ministry of Education, 2018). This framework emphasizes providing differential responses to foster equal opportunities rather than focusing solely on essential academic achievements in low-SES schools. Programs such as "Innovative Learning Spaces" and "Controlled Parental Choice" reflect this more holistic educational approach (Ministry of Education, 2019, 2021).

However, this asset mindset coexists with persistent challenges. PISA 2018 and 2022 data show that while Israel's average global competence score (496) exceeds the international average (474), the distribution of scores is the broadest among participating countries (OECD, 2018). Awareness of global issues varied substantially among Israeli students, and socioeconomic background strongly predicted performance. These disparities suggest that awareness and intent among teachers, while present, require substantial systemic support to translate into equitable outcomes.

This asset mindset has important policy implications. Rather than assuming disadvantaged schools need to "catch up" on basic skills before addressing global competence, policymakers might recognize the commitment already present in these schools and ask: What support would enable these motivated teachers to implement global competence effectively? The answer, our findings suggest, lies in professional development and pedagogical tools not deficit remediation.

5.5 Building the Bridge: Implementation Support Structures

If awareness exists but practice lags, what builds the bridge? Our findings point to two critical support structures:

1. Sustained, collaborative professional development: The moderate positive correlation (rs = .372) for professional development participation indicates that ongoing learning opportunities matter. However, not all professional development is equally effective. Research by Darling-Hammond et al. (2017) and Desimone (2009) identifies key features of effective professional development:

- **Content-focused**: Directly addresses the pedagogies teachers will use
- **Active learning**: Includes opportunities for practice and feedback
- **Collaborative**: Involves joint work among teachers
- **Sustained**: Extends over time rather than one-shot workshops
- **Job-embedded**: Connected to teachers' daily work with students

Professional development that possesses these characteristics can help teachers develop both the knowledge and practical skills necessary for global competence implementation. As Avalos-Bevan and Bascopé (2017) found, teachers participating in structured professional development programs reported broader implementation of innovative approaches, including those related to global skills.

2. Pedagogical diversity as practical capacity: The strong correlation (rs = .512) suggests that pedagogical diversity functions as implementation capacity itself. Teachers need not only understanding of global competence but concrete instructional strategies for bringing it to life in classrooms. This argues for professional development that builds teachers' repertoires of evidence-based practices project-based learning, cooperative structures,

accountable talk while simultaneously demonstrating how these practices advance global learning goals.

Teaching that incorporates multiple cultural perspectives promotes critical thinking and cross-cultural empathy, which are core elements of global competence (Ladson-Billings, 2014; Sleeter & Carmona, 2017). Integrating diverse teaching techniques—including simulations, discussions, and project-based learning in the context of cultural diversity contributes to the development of intercultural communication and global problem-solving skills (Merryfield, 2008).

Together, these support structures address both the knowledge and practice dimensions of the implementation challenge. Professional development builds awareness and provides initial exposure to new approaches, while pedagogical diversity reflects the practical capacity to enact those approaches consistently.

6. IMPLICATIONS AND RECOMMENDATIONS

6.1 For Educational Policy

1. Shift resource allocation from "deficit remediation" to "capacity building": Rather than viewing disadvantaged schools solely through a compensatory lens—providing resources to address deficits—policy should recognize and build upon the commitment to global competence already present in these contexts. Resource allocation should emphasize professional development and pedagogical support structures. As Ayalon et al. (2019) note, differential budgeting in Israel helps allocate additional resources to schools serving disadvantaged populations, but these resources must be directed toward building implementation capacity.

2. Invest in sustained, collaborative professional development: One-shot workshops are insufficient. Systems should create ongoing professional learning opportunities with the features identified by Darling-Hammond et al. (2017): content-focused, active, collaborative, sustained, and job-embedded. This requires dedicated time, facilitator expertise, and financial investment.

3. Create differentiated support for veteran teachers: Rather than assuming that experienced teachers will lead innovation automatically, provide targeted support that helps veteran educators expand their pedagogical repertoires. This might include intergenerational peer learning structures where both newer and veteran teachers contribute expertise. As Day and Gu (2009) emphasize, continuous training, professional support, and school environments that encourage innovation are essential for all teachers, regardless of seniority.

4. Integrate global competence into teacher education: Both initial and advanced teacher training programs must prioritize global competence frameworks, culturally responsive teaching, and experiential pedagogies (Zhao, 2010). The gap between theoretical academic training and practical implementation found in this study underscores the need to better integrate global education into advanced teacher training and specialization programs.

6.2 For Educational Practice

1. Establish school-based professional learning communities (PLCs): The research on social capital (Hargreaves & Fullan, 2012) suggests that collaborative structures are essential for sustained improvement. Schools should create regular opportunities for teachers to engage in collective inquiry around global competence implementation, examining student work together and refining instructional approaches. As Hargreaves and O'Connor (2018) note, collaborative professionalism supports pedagogical innovation.

2. Build pedagogical diversity through practice, not just theory: Professional development should emphasize hands-on experience with project-based learning, cooperative structures, and accountable talk. Teachers should have opportunities to try these approaches, reflect on implementation challenges, and refine their practice with colleague support. Culturally responsive teaching practices and pedagogies that integrate diverse cultural perspectives should be central training strategies (Banks, 2015; Gay, 2018).

3. Make the implicit explicit: Help teachers recognize that pedagogies they may already use group work, project-based units, discussion can be leveraged intentionally for global learning. Rather than treating global competence as entirely new content, frame it as an intentional focus within evidence-based practices many teachers already employ to some degree.

4. Provide curriculum resources and time: Teachers need accessible curriculum materials that integrate global themes and dedicated time within the school day to enact inquiry-based approaches. Implementation support should include not just training but practical resources.

6.3 For Future Research

6.3 For Future Research

First, as this cross-sectional study identifies correlations but cannot determine causality or developmental trajectories, longitudinal research following teachers through sustained professional development would illuminate how implementation capacity develops over time and what support structures prove most critical at different stages.

Second, while our findings suggest that teachers in disadvantaged schools demonstrate awareness of global competence importance, we did not directly measure awareness as distinct from implementation. Future research should employ both survey and interview methods to understand teachers' conceptions of global competence, their beliefs about its relevance for their students, and the barriers they perceive to implementation.

Third, it remains to be seen whether these patterns hold in other national contexts or are specific to the Israeli system's Cultivation Index approach. Comparative research would identify which findings are generalizable and which reflect particular policy or cultural contexts.

Finally, the influence of school leadership in supporting global competence implementation warrants further investigation. Research by Leithwood and colleagues emphasizes that transformational leadership fosters teacher empowerment and pedagogical innovation.

7. LIMITATIONS

Several limitations warrant attention in interpreting these findings. First, this study relied on teachers' self-reported implementation, which may not fully align with observed practice. Social desirability bias may lead some teachers to overestimate their implementation. Future research should triangulate self-report data with classroom observation and analysis of student work.

Second, the cross-sectional design means that correlation does not imply causation. While professional development and pedagogical diversity show strong associations with implementation, we cannot definitively conclude that these factors cause improved implementation. Experimental or quasi-experimental designs would provide stronger causal evidence.

Third, as this study examined a single geographic context one city in Israel generalizability is limited. The specific dynamics of Be'er Sheba's school system, the Israeli policy context, and the Cultivation Index approach may not transfer to other settings. Findings may not generalize to central urban areas, high-SES communities, or non-Hebrew-speaking sectors.

Fourth, regarding the distinction between implementation and effectiveness, this study measured teachers' reported implementation frequency but not the quality or student impact of these practices. High implementation frequency does not guarantee effective instruction or meaningful student learning. Future research should examine student outcomes associated with different levels and types of global competence implementation.

Finally, the sample was predominantly female (96.8%), and most teachers had participated in professional development within the past two years (91.0%). These characteristics may limit generalizability to contexts with different demographic profiles or lower PD engagement. Despite these limitations, the study's clear pattern of findings particularly the contrast between static characteristics and dynamic support mechanisms provides valuable insights for educational policy and practice.

8. CONCLUSION

This study reveals a critical insight for educational systems pursuing global competence goals: the problem is not awareness but action, not teacher deficits but insufficient support. Teachers, particularly those in schools serving disadvantaged communities, recognize the importance of preparing students for an interconnected world. The challenge lies in providing the practical tools, professional learning opportunities, and collaborative structures necessary to translate that awareness into consistent classroom practice.

The findings challenge three pervasive assumptions: (1) that disadvantaged schools cannot pursue ambitious educational goals, (2) that teacher experience and credentials automatically predict implementation capacity,

and (3) that policy mandates alone drive instructional change. Instead, this study demonstrates that implementation capacity is built through sustained support—particularly professional development and the use of diverse instructional strategies rather than being an inherent characteristic of certain teachers or schools.

The awareness exists; the commitment is present. Our task is to build the bridge from intention to practice and that bridge is constructed from professional development, pedagogical tools, and collaborative learning structures. As Hargreaves and Fullan (2012) argue, professional capital not just human capital determines teaching quality. Building all three forms of capital (human, social, and decisional) simultaneously through collaborative professional learning is essential for sustained improvement.

The positive correlation between school disadvantage and teachers' awareness of global competence importance suggests that even schools facing socioeconomic challenges recognize these competencies as essential tools for addressing the challenges of an evolving, interconnected reality (OECD, 2018, 2022). However, as our findings demonstrate, awareness without adequate support structures remains insufficient for consistent implementation.

As educational systems worldwide grapple with the imperative to prepare students for global citizenship, this research offers evidence that the path forward lies not in sorting teachers or schools into categories of "ready" and "not ready" but in building universal capacity through systematic support. By investing in how we support teachers rather than focusing on who they are, we can unlock the commitment already present in schools and prepare all students for meaningful participation in our interconnected world.

The greatest educational challenges often hold the greatest potential for change. Through targeted investment in professional development, promotion of pedagogical diversity, and creation of collaborative professional learning structures, education systems can transform awareness into action and ensure that all students regardless of socioeconomic background develop the global competencies necessary for the 21st century.

CONFLICT OF INTEREST STATEMENT

The author declares no conflicts of interest related to this research.

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ETHICS APPROVAL

This study was conducted in accordance with ethical guidelines for research involving human participants. All participants provided informed consent, and data were collected and stored in compliance with privacy and data protection regulations.

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REFERENCES

1. Anyon, J. (1980). Social class and the hidden curriculum of work. Journal of Education, 162(1), 67–92. https://doi.org/10.1177/002205748016200106
2. Argyris, C., & Schön, D. A. (1974). Theory in practice: Increasing professional effectiveness. Jossey-Bass.
3. Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. Teaching and Teacher Education, 27(1), 10–20. https://doi.org/10.1016/j.tate.2010.08.007
4. Avalos-Bevan, B., & Bascopé, M. (2017). Teacher informal collaboration for professional improvement: Beliefs, contexts, and experience. Education Research International, 2017, Article 1357180. https://doi.org/10.1155/2017/1357180
5. Ayalon, H., Blass, N., Feniger, Y., & Shavit, Y. (2019). Educational inequality in Israel: From research to policy. Taub Center for Social Policy Studies in Israel. https://www.taubcenter.org.il/wp-content/uploads/2020/12/educationinequalityinisraeleng.pdf
6. Banks, J. A. (2015). Cultural diversity and education: Foundations, curriculum,

and teaching (6th ed.). Routledge. https://doi.org/10.4324/9781315622347
7. Ben David-Hadar, I. (2023). Cultivation index: A background paper (in Hebrew). Bar-Ilan University. https://meyda.education.gov.il/files/LishcatMadaan/MadadTipuach/review-bendavid-hadar.pdf
8. Blass, N. (2014). Inequality in the education system: Who opposes and who benefits from it? Taub Center for Social Policy Studies in Israel. https://www.taubcenter.org.il/wp-content/uploads/2020/12/inequalitiesintheeducationsystemenglish.pdf
9. Boix-Mansilla, V., & Jackson, A. (2011). Educating for global competence: Preparing our youth to engage the world. Council of Chief State School Officers and Asia Society Partnership for Global Learning. https://www.ccsso.org/resource-library/educating-global-competence-preparing-our-youth-engage-world
10. Darling-Hammond, L. (2000). How teacher education matters. Journal of Teacher Education, 51(3), 166–173. https://doi.org/10.1177/002248710005100302
11. Darling-Hammond, L. (2010). The flat world and education: How America's commitment to equity will determine our future. Teachers College Press.
12. Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute. https://doi.org/10.54300/122.311
13. Day, C., & Gu, Q. (2009). Veteran teachers: Commitment, resilience, and quality retention. Teachers and Teaching, 15(4), 441–457. https://doi.org/10.1080/13540600903057211
14. Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. Educational Researcher, 38(3), 181–199. https://doi.org/10.3102/0013189X08331140
15. Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature (FMHI Publication No. 231). University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
16. Fortus, D. (2011). Learning in contexts. International Journal of Science Education, 33(8), 1103–1126.
17. Fullan, M. (2007). The new meaning of educational change (4th ed.). Teachers College Press.
18. Gay, G. (2018). Culturally responsive teaching: Theory, research, and practice (3rd ed.). Teachers College Press.
19. Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. Teaching and Teacher Education, 21(8), 967–983. https://doi.org/10.1016/j.tate.2005.06.007
20. Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. Teachers College Press.
21. Hargreaves, A., & O'Connor, M. T. (2018). Collaborative professionalism: When teaching together means learning for all. Corwin Press.
22. Klein, S. (2011). Teaching for transfer. In J. Mestre & B. Ross (Eds.), Psychology of Learning and Motivation (Vol. 55).
23. Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. Harvard Educational Review, 84(1), 74–84. https://doi.org/10.17763/haer.84.1.p2rj131485484751
24. Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. School Effectiveness and School Improvement, 17(2), 201–227. https://doi.org/10.1080/09243450600565829
25. Leithwood, K., Harris, A., & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. School Leadership & Management, 40(1), 5–22. https://doi.org/10.1080/13632434.2019.1596077
26. Mercer, N. (2010). The analysis of classroom talk. British Journal of Educational Psychology, 80, 1–14.

https://onlinelibrary.wiley.com/doi/abs/10.1348/000709909X479853
27. Merryfield, M. M. (2008). Scaffolding social studies for global awareness. Social Education, 72(7), 363–366.
28. Ministry of Education, Israel. (2018). Fairness in education (in Hebrew). Author.
29. Ministry of Education, Israel. (2019). Controlled parental choice (in Hebrew). Author.
30. Ministry of Education, Israel. (2021). Innovative learning spaces (in Hebrew). Author.
31. National Research Council. (2012). Education for life and work: Developing transferable knowledge and skills in the 21st century. National Academies Press.
32. OECD. (2018). Preparing our youth for an inclusive and sustainable world: The OECD PISA global competence framework. OECD Publishing. https://doi.org/10.1787/9789264289024-en
33. OECD. (2022). PISA 2022 results (Vols. 1–3). OECD Publishing.
34. Reimers, F. M. (2020). Educating students to improve the world. Springer Nature. https://doi.org/10.1007/978-981-15-3887-2
35. Siczek, M. M., & Engel, L. C. (2019). Teachers' interpretation of global education initiatives in diverse contexts. Educational Policy, 33(3), 486–515. https://doi.org/10.1177/0895904817725872
36. Strobel, J., & Van Barneveld, A. (2009). When is PBL more effective? Interdisciplinary Journal of Problem-Based Learning, 3(1), 44–58.
37. Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. Teaching and Teacher Education, 26(4), 1059–1069. https://doi.org/10.1016/j.tate.2009.11.001
38. Sleeter, C. E., & Carmona, J. F. (2017). Un-standardizing curriculum: Multicultural teaching in the standards-based classroom (2nd ed.). Teachers College Press.
39. Thrupp, M. (1999). Schools making a difference: Let's be realistic! Open University Press.
40. Valencia, R. R. (Ed.). (2010). Dismantling contemporary deficit thinking: Educational thought and practice. Routledge. https://doi.org/10.4324/9780203853214
41. Zeichner, K. M., & Liston, D. P. (2013). Reflective teaching: An introduction (2nd ed.). Routledge. https://doi.org/10.4324/9780203771136
42. Zhao, Y. (2010). Preparing globally competent teachers: A new imperative for teacher education. Journal of Teacher Education, 61(5), 422–431. https://doi.org/10.1177/0022487110375802