

Original Paper

Nature of Teaching, Satisfactory Teaching Experience and the General Development Relationship Research

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Abstract

This study investigated the cognitive and illustrative significance of high school teachers in the classroom with narrative plots. The results show that on average more than half of secondary school teachers have teaching experience. They believe that existence is related to the nature of teaching, satisfactory teaching experience and the general development of the student. This research advocates for teaching modules grounded in daily instructional practices and equips educators with language and knowledge that align with these practices.

Keywords

Engagement in instruction, Comprehensive child development, Secondary education instructors, Interaction among teacher, student, and subject matter, Survey featuring narrative scenarios

1. Introduction

In educational research, presence has emerged as a concept that characterizes teaching dynamics and contextual factors associated with teachers' real-time evaluations and actions in the classroom. Teacher Presence (PIT) means a space in which the teacher is fully focused, conscious and responsive, closely follows the current situation in the classroom, and participates in all presence and emotions in the classroom. Qualitative research has shown, as Roefs et al. (2021b), that PIT is related to teachers' deep and detailed understanding of the teaching environment and their sensitivity to intuition, efficiency or empathy. The concept of PIT corresponds to a teaching method in which the ideal issues and objectives of education cannot be fully predetermined, but depend on certain factors in a given situation. This method is reflected in the teaching research of interactive educational processes, including a combination of teachers, students, teaching methods, themes and unique environments. The caliber of instruction needed for interactive learning surpasses the proficiency evaluated in the Skills Profile or within the Skills and Behaviour Inventory. In recent years, many countries around the world have increasingly used key indicators of teacher, student and school performance as a "checklist" for teacher evaluation. On the contrary, an increasing number of studies use the concepts of teachers' attention 11,

adaptive learning 12.13 and action analysis 14.15 to measure the quality of teaching and demonstrate their effectiveness in assessing the quality of teachers' direct actions and in deliberate long-term decisions on pupil progress and growth. A number of scholars within this domain have implicitly or explicitly highlighted the significance of Presence in Teaching (PIT) as a rich foundation for professional focus, flexible learning, and reflective practice. In essence, engagement in teaching is viewed as a crucial asset for concentration, adaptive learning, and action reflection. For instance, Mason (2002) posits that concentration necessitates substantial immersion from educators. Additional researchers have indicated that, in order to reflect on behavior and professional judgment, teachers "experienced difficult experiences, appreciated their complexity and profound clarity" and 16 participated in "experienced life" and "professional existence".

The current understanding of PIT is based on the conceptualization and qualitative research of Rogers and Rider Roth (2006). Rogers and Rider Roth (2006) crafted the concept of PIT, drawing from educational philosophy and research, psychology, art, religion, and insights gleaned from student interviews and writings. They pinpointed three facets of connection: self-connection, student-connection, and teaching-connection. Li et al. (2023) sought to bolster the sense of presence among educators and pupils during supervisory sessions, and PIT was considered a "presence in learning" because it relies on PIT and uses PIT (s). The port size is the same as SELF19. Wei (2023) conducted a qualitative study of the effect of meditation practice on teacher attendance, and the results showed that teachers increased student acceptance and attention. This is in line with Rogers and Rider Roth (2006), who demand student engagement. In addition, Rogers and Reid Ross stressed the moral provisions of the Convention on Rights and Justice, namely the interest in the "holistic" development of students and education in a fairer and more democratic society. They hold the view that students' holistic development encompasses both their scholarly progress and their personal maturation, as well as their responsible participation in the world. This is the reason why Pete diverges from notions like "flow" and "consciousness," which primarily concentrate on the immediate experience of individuals.

Furthermore, a qualitative research by Raider Roth (2014) indicates that introspection and conversation with peers can assist early childhood educators in becoming proactive and perceiving students' conduct challenges. The study comprised two qualitative investigations in a high school setting involving 12 instructors and 50 pupils, with the aim of understanding their experiences of interaction with teachers, students and themes. Pete as an expression of "existence" in learning is an important part of it. These dual studies also highlight the significance of a sense of affiliation between educators and students. In these studies, 'meaning' refers to the meaning of teacher and student experience. First of all, there are several aspects of the overall development of students' personality associated with these meanings. Secondly, teachers' perception of existence is linked to their multi-level sense of achievement. Gaining a more profound comprehension of these implications aids in grasping why educators and pupils cherish presence.

Drawing from Rogers and Rider Roth's (2006) framework of PIT, along with the aforementioned

qualitative studies and our own findings, we designed and described a detailed conceptualization of PIT including three structures and their variants, as well as an overview of all reported values related to the existence of 22. This provides the basis for exploring the existence and meaning of teaching, and our goal is to adopt a holistic approach. Early research was mostly qualitative and carried out with small samples of teachers and students (mainly upper secondary schools), leading to a lack of in-depth understanding of PIT in teaching practice. Maybe a lot of teachers have experienced Pete. Since PIT is not an obvious concept or general term among teachers, they might not consistently recognize the experience and worth of PIT. If a large number of useless teacher samples are identified and appreciated by PIT, the concept of good PIT can also be strengthened. Empirical insights into the essence of PIT and its implications for the growth of educators and pupils can be integrated into teacher education to equip both students and teachers with the skills to navigate the complexities and scenarios of instruction. Consequently, we initiated research into the frequency with which a substantial sample of randomly chosen high school educators encounter PIT in their routine practice and its implications for PIT. Roefs et al. (2021a, 2021b) provided an exhaustive conceptualization of PIT, drawing on the outcomes of the aforementioned qualitative studies, and elucidated all its facets within a qualitative research framework. Building on this research, we designed a large-scale PIT study on the dilemma of aimless teachers with narrative anecdotes. The later stages of this study are discussed and analyzed in detail in another article. This article presents, analyzes and discusses research results based on existing PIT literature. Therefore, our first goal is to find out if teachers recognize and evaluate our sophisticated PIT concept; Secondly, we want to demonstrate how complex statistical analysis validates and analyses complex concepts on a large scale, such as PIT.

2. Theoretical Background

A qualitative exploration with a dozen high school educators revealed that the triad of classroom presence mirrors the triad of dimensions articulated by Rogers and Ryder Ross (2006): the realm of personal consciousness, the student-centered state and reactive behavior. PIT also found two additional features. Simultaneity of three structures. In Pete's complex experience, the teacher's understanding of inner experience is in harmony with his attention and the student's perception, and the answer comes from the teacher's awareness. Another characteristic is cross-subjectivity. Philosophy 23, 24 and Conceptual Insight 19 show that PIT is an intersubjective experience that blends into the interaction of teachers and students, as qualitative research confirms. Rogers and Rider Roth (2006) mentioned mutual trust, mutual vision and mutual meaning between teachers and students in the present. Drawing from the current literature and our qualitative research, we have formulated the definition of Pete, which encompasses the two characteristics mentioned above. We define presence as follows:

Pay attention to what is happening in the classroom, and in this process the answer comes from understanding the situation and identifying opportunities for student development. This is an experience of the (repeated) connection between teachers, students and subjects.

The (ongoing) linkage "is part of the definition, as some instances of Pete's experiences initiated with a disconnect between teachers and students, a topic we will address subsequently. Following this, we will delve into the three components of the well. Each component is made up of various elements that mirror its manifestation in the daily instructional experiences and actions of teachers. As depicted in Figure 1.

2.1 Self-awareness

The initial framework pertains to the educator's level of focus and self-awareness. Rogers and Ryder Ross (2006) contend that an individual's bond with their students is enhanced by a more profound connection with their own self. Along similar lines, Meijer et al. (2009) performed an in-depth analysis of a student teacher who cultivated a sense of presence, aided by supervisory sessions, showing that deeper trust can improve his ability to communicate with students. Roefs et al. (2021b) also found this in their study describing the (physical) stress experience caused by palpitations, giving feedback to teachers to understand what is happening and making answers or decisions about how to cope. Trust is based on their understanding of classroom situations to determine how to interact with students. However, self-awareness does not naturally manifest itself in concentration on students, but in tension, such as excessive attention to students and teachers who forget themselves. Two variants of this structure emphasize the different qualities of attention and awareness that teachers can have: intuition or awareness.

The first choice is a feeling rooted in itself, which belongs to the intuitive nature of self-consciousness. When teachers are fully focused on developing events, they experience these changes. This is a stark contrast to thinking about what happens when you consciously withdraw and make wise decisions. Roefs et al. (2021b) found that when teachers focus on themselves, they gain self-confidence, confidence, and vitality in the classroom, as well as tranquility, stability, or sincerity. Rogers and Reid Ross (2006) expressed the opposite view: "Divide me". Should (new) educators tailor their conception of the quintessential instructor to align with the anticipated norms of the school, peers, or society, and come to believe that "individuality is not allowed in the classroom," a risk indeed arises. The gap between one's professional identity and personal identity may diminish trust. In research conducted by Li et al. (2023), the objective of the individual teacher's control program was to integrate the personal and professional facets of education. That's why teachers' students experience more entertainment. This corresponds to Brown et al. (2016).

Another option is a reflective (physical) experience in which the teacher must be separated from the classroom environment. This involves being open and focused on bodily experiences, reflecting and changing your reactions. This is reflected in the words of the professor of history:

Pupils start to comprehend that history is intertwined with their existence. I believe it's more crucial for them to grasp this, and it's something I appreciate. I've come to terms with the necessity to relinquish control. I must confront this reality.

The teacher understands his own thoughts and feelings, and after a short reflection on their behavior,

draws a conclusion. In all high-quality studies, emotions and emotional incentives motivate teachers to think in practice. This aligns with studies on affective teaching methods. In addition, Wei (2023) mentioned teachers' understanding of their physical experiences and reflection on the significance of their actions. For example, a teacher who "felt stiffness" [...] "strove to keep equilibrium," "inhaled profoundly," leading to a brief intermission for contemplation and a redirection of the necessary actions. This is consistent with Mintz's (2016) psychoanalytic explanation of reflection, in which certain emotional moments struggling with uncertainty trigger thinking in action and help determine what is needed in certain categories.

2.2 Focus on Students

The second component encompasses educators' focus and comprehension of students in their capacity as unique individuals and as collective entities. As Schulz (2003) described, it is about students' interests as individuals and the environment in which they live, as well as the need to remain open and accept what they observe. Schultz put forth a theoretical model for profound listening that emerged from qualitative studies involving educators and pupils. For instance, teachers intentionally enhance pupils' comprehension of significance, construct significance, and how themes impact them. Dewey's concept of vitality (1933) also inspired the creation of a "student-centered" approach, highlighting educators' focus and analysis of students' verbal and non-verbal cues.

Teachers must be sensitive to all physical manifestations of spiritual states and the meanings of all words. He should not only understand their importance, but also their importance as indicators of students' psychological stages, observation and level of understanding.

Focusing on students means mastering their full expression and interaction cognitively, while interacting with them in an impactful way 19,28,29. The latter should be open to student mobility and the role of situations and emotions described by Hinsdale (2016) and Rogers (2020) in action reflexes. Therefore, as Rogers and Rider Roth (2006) and Noddings (2013, p. 199) have pointed out, acknowledgment is a crucial aspect for educators to concentrate on their pupils: "When every student speaks to me, all I have to do is present myself to them completely and arbitrarily.

Participation in learning means not only communication and close relationships with students, but also constant separation from students. Rogers and Rider Roth (2006) described how modern consciousness draws people's attention to misunderstandings, clashes, lack of energy or self-existence (related to self-consciousness) and seeks meaning in separation and correction. In the research conducted by Roefs et al. (2021b), French educator Anne exemplified classroom anger and promptly recognized its significant impact on every student. He publicly apologized for what had happened and discussed anger in class, which helped restore contact between teachers and students.

Roefs et al. (2021b, 2023) found three alternatives to this structure, where teachers' attention and awareness of student education vary. Students' experiences and their unique perspectives and characteristics as individuals. By concentrating on pupils' educational progress, educators direct their focus towards "challenges, remarks, actions, and uncertainties" to achieve a more profound

comprehension, grasp, or construct upon their existing knowledge. Trust and personal experiences reflect interest in one's own experiences. It also encompasses grasping the influence of educational activities on the collective ambiance, such as sharing joy and experiencing energy or energy consumption. Teachers achieve this by paying attention to expressions in their bodies, such as holding their breath or focusing on their eyes. Note and acknowledge that students are individuals with unique perspectives and characteristics, which is mainly reflected in teachers who emphasize their connection to the subject, sometimes unique and new. Teachers believe that students' ideas, opinions, experiences, or thoughts enrich classroom interaction and, in some cases, inspire their curriculum. Secondly, these teachers emphasize the uniqueness of students. They noticed, for example, that students suddenly showed great interest or discussed talent in a particular topic.

Overall, these changes underline that, based on PIT's experience, teachers "see them clearly (students) and see them as a whole.

2.3 Acting Responsively

The third structure includes teacher behavior, which varies from very subtle to obvious, as a result of the fact that the classroom immediately becomes aware of its impact on students' development opportunities. These reactions are spontaneous, combined with theoretical knowledge and empirical (implicit) knowledge to respond to the present. Two specific response behaviors were used in the study and conclusions were drawn from a study on the existence of a student. Choose teachers who will have a significant impact on their field experience in response. Both options should create space for students to create their personal and collective meaning and humanity.

In the first scenario, teachers who encourage students to participate in high-quality research aim to promote learning through dialogue and collaboration. When teachers encourage students to participate actively, they are motivated to dissect, devise solutions, vocalize thoughts, err, deliberate, perform, heed, and retort. Pete expressed a conscious balance between leadership and interior design. On the other hand, teachers hope to deepen the discussion by proposing discussion proposals. On the other hand, they prefer not to offer excessive advice or judge the correctness of answers prematurely to foster an environment where students feel emboldened to learn and think courageously.

The second option encourages students to discuss topics and interact in class, which means creating opportunities for students to cognitively and emotionally combine topics and classroom interaction through intuitive understanding, analysis, experience, emotion, and imagination. Teachers achieve this goal, for example through situational training. They use special situations, phenomena, situations, experiences, characters, stories, etc. They invite students to introduce a theme or ask questions about solutions, experiences, and feelings about content. Courses and assignments are tailored to specific student groups, making the themes interesting, exciting, imaginative or vibrant.

2.4 Significances Ascribed to PiT

Grasping the significance of PIT for student growth and learning experiences is still in its infancy. Rogers and Rider Roth (2006:267) contend that students studying Law and Equality experience "a

moment of realization, a sense of being acknowledged and comprehended." a sense of security and discovery of their passion in addition to combining legal and legal education with the overall development of students in academic research and personal growth.

The qualitative research carried out by teachers and upper secondary school students also shows the importance of comprehensive student development. First, students integrate their presence into learning. When they are present, they gain an insight into the subject matter and start to perceive its relevance to the world or their personal existence. Examination of their individual experiences also uncovered diverse viewpoints on their self-development, especially trust, new perspectives and attitudes. Secondly, teachers believe that the attendance rate is the most important factor in the personal development of students. This means respecting students' different perspectives and developing new worldviews. Attendance may also be due to how students prepare for exams or have an in-depth understanding of the subject, but it is rare or not very obvious.

Likewise, Peschl (2007) crafted a methodological structure to outline the attainment of deep-seated change, determining that anticipated mindsets—concerning acceptance, reflection, receptiveness, and profound comprehension—are essential themes that shape living conditions, particularly human elements, throughout the transition. In terms of student personal development, Bista believes that existence helps students understand subjectivity, interests, perspectives, individual principles and objectives. Similarly, Dewey (1933) and Notting (2013) suggested that students' thoughts and reflections as well as subjective experiences should be included in the transmission process. The prevailing subjective educational experience elucidates the strong connection between students' personal growth and the current encounters of both instructors and learners.

In educational research, students' learning and personal growth are frequently categorized as part of general education. Recent international education studies show that many countries recognise the importance of comprehensive child development, but efforts in this area are limited. Integrating children's comprehensive development into teaching practice is supported by trust-based (holistic) school methods, learning communities and formal programmes such as the teaching of social and emotional skills. A better understanding of PET can strengthen this work because teachers emphasize the importance of existence for the personal development of students, and when they are present, teachers can feel that they are effectively educating the entire student.

Furthermore, the experience of presence appears to possess an inherent significance, including student interest and free participation, as well as teacher satisfaction such as self-confidence, happiness and even deep satisfaction, since instances of presence often link to teachers' unique values and beliefs. Participation is also linked to complex experiences such as frustration, learning needs that are as difficult as students, and in some cases teachers experience complex, emotional or exhausting learning processes. There is much congruence between the viewpoints of educators and pupils. What sets these studies apart is that educators discuss pupils' enduring growth and their role as future citizens, while student learning demonstrates the importance of classroom experience.

However, all values obtained from qualitative research are typically related to the presence of teachers and students associated with PIT. A goal of this research is to gain a clearer comprehension of how educators primarily commit to classroom experiences of PIT (encompassing both learning and personal growth experiences) and their individual teaching journeys.

3. Research Questions

The aim of this study is to thoroughly understand the experiences of an uncontrolled sample of high school teachers in relation to PIT. This enhances the conceptualization of PIT by expanding the qualitative perspective prevalent in most PIT research. A comprehensive approach allows for the exploration of whether teachers acknowledge the PIT phenomenon, consider it an important educational phenomenon, as often mentioned in literature, and whether they study this "meaning": what do they see in Pitt and what is the strongest meaning? The following three research questions are therefore proposed.

1. Do educators encounter a sense of presence in their teaching within their classrooms, and if so, with what frequency?
2. What significance do educators ascribe to PiT regarding students' in-class experiences?
3. What significance do educators ascribe to PiT concerning their own teaching experiences?

4. Methods

To examine the prevalence of PIT among educators and its relevance to them, we used a cross-sectional study to study secondary teachers (12-18 years old) in the Netherlands. The emphasis is on high schools, as most of the qualitative research created for this basic research was carried out in upper secondary schools. In addition, As Tze et al. (2016) and Macklem (2015) have noted, the incidence of classroom ennui and waning student engagement in high schools underscore potential links within this educational setting when contrasted with elementary education.

The Dutch education system is an international exception. In the Netherlands, The liberty to pursue education is a constitutional entitlement, encompassing the entitlement to public financing and the prerogative of schools to instruct based on their religious, ideological, or pedagogical convictions. The majority of Dutch pupils are enrolled in government-funded institutions. Educational caliber is predominantly governed by national criteria established by the Ministry of Education, Culture, and Science, which outline the subjects, goals, and assessment criteria for student achievement. Similar to numerous nations globally, the responsibility for examinations has become central to the Dutch educational framework. Secondary schooling is stratified into various tiers, and at the end of last year a national written test was organised on the basis of subjects and levels of education. The study was conducted on second-year secondary education, second-year secondary education and university preparatory teachers in VMBO-T, a second-year secondary education programme that contains only general subjects. The subject is not a teacher teaching specialized subjects, sports or applied art, as

teaching methods require completely different descriptions and the existing high-quality knowledge does not provide sufficient feedback.

4.1 Participants

Participants are enlisted through diverse methods to ensure the most extensive response possible. First of all, we contacted six schools in different regions. Each school has a contact point through which teachers can invite via email, intranet or teacher meetings. Secondly, individuals were gathered via social media channels, including LinkedIn and the Dutch educational app Teacher Tapp. Irrespective of the recruitment approach, the identical message should be employed in the invitation correspondence.

271 individuals engaged in the web-based survey. The criteria we applied were as follows: initially, participants had to complete no less than 75% of the questionnaire, which is the first part. Second, participants in the target group: STEM, social and grammar secondary school teachers (Dutch general subject classification). Fewer than 75% of the classes were attended by 10 students, of whom 3 were not part of the target group (i.e. they worked in vocational and technical sub-projects of preschool education or were sports or art teachers). Post-exclusion, the study included 258 individuals, with 113 hailing from six schools (fairly evenly spread, ranging from 11 to 21 participants per institution), and 145 were recruited via social media platforms. As depicted in Table 1, participants fit perfectly into the target group according to gender and age; participants include more STEM teachers and fewer language teachers than the target group.

Table 1. Comparison of Participant Demographics with Those of the Intended Population (N=258)

Variable	Categories	Participants		Target population ^a
		Frequency	Valid percentage	Percentage
Gender	Male	137	45.60	44.45
	Female	163	54.40	55.56
	Missing	10		
Age	≤ 24 years	10	3.05	3.66
	25-34 years	64	21.55	25.85
	35-44 years	77	25.50	25.55
	45-54 years	79	26.45	22.30
	55-64 years	63	20.80	20.50
	≥ 65 years	7	2.65	2.14
	Missing	20		
	≤ 3 years	29	9.50	N/A
Years of teaching experience	4-14 years	136	45.45	N/A
	15-24 years	61	20.35	N/A

	≥ 25 years	74	24.70	N/A
Teaching subject ^b	Languages	106	35.55	36.70
	STEM	128	42.50	38.85
	Social studies	66	21.95	24.45
	Missing	15		

^a Gender and age data for the target group are sourced from The Dutch Council for Secondary Education (VO Raad, 2021); information regarding teaching disciplines is sourced from The Education Executive Agency of the Dutch Ministry of Education (DUO, 2022).

^b Languages: German, English, French, Dutch, and Ancient languages; STEM fields: Biology, Physics, Chemistry, NLT (Nature, Life, Technology), Geography, and Mathematics; Social science subjects: History, Culture & the Arts (theoretical), Economics, Business Economics, Philosophy, Religion, and Civics.

4.2 Procedures

The study's data collection was conducted via web-based questionnaires between May and November 2021. The Qualtrics platform was utilized to design the online surveys. After initiating the online survey, participants were given a week to finish it.

Forced reactions were used and participants were not compensated. The average completion time is 19 minutes. Throughout the survey, participants had the opportunity to raise any issues, comments, or concerns. Comprehensive contact information for the lead author and the ethics committee was provided. This research received approval from the Radboud School of Education Ethics Committee, reference code 20U.015679.

4.3 Instrument

In this research, we employed a joke-telling survey that had been meticulously examined and authenticated by educators and specialists, showcasing exemplary PIT instances within regular teaching routines. First, because we assume that many teachers are unfamiliar with the concepts of law and justice, the real experiences of law and justice described in narrative incidents can inspire respondents to recall and rethink their experiences in the field of justice and justice. Secondly, the use of interludes enables a fair examination of the characteristics of PIT: in PIT's "global" experience (simultaneity), a structured combination of three structures is placed in a concrete and real environment of interaction with teachers (subjectivity).

The questionnaire is structured into three sections: 1) the occurrence of PIT experiences, 2) the significance of PIT, and 3) the particular characteristics of educators. In the introduction, participants gave a short definition of Pete: "The teacher closely follows what happens in the classroom and responds positively." The core of the study consists of six narrative anecdotes that summarize Professor Pitt's experiences of qualitative material. These events describe the conditions and conditions in which

PIT takes place to encourage participants to reflect on their PIT experience and avoid reactions in a vacuum. This is particularly crucial as we presume that the majority of educators may not be acquainted with the PIT concept. Initially, Boone et al. (2021) established these sequences. Figure 2 illustrates an instance of a minor event. This engagement encompasses three structural variations (from an experimental viewpoint) that mirror the concurrent essence of the structure. Figure 1 shows that this targeted PIT experience is implemented across the classroom teaching and interactive environment, revealing the horizontal nature of PIT. This mirrors a manageable element where an increasing number of minor incidents start to resemble each other, thereby neutralizing trivial disparities. Additionally, this scenario comprises varying contextual facets across distinct storylines, providing a sense of authenticity. All interfaces have this structural structure, so each variant appears at the same frequency in a sample of six interfaces and has as many different combinations as possible. Therefore, these six groups represent different forms of PIT expression (the application contains six small illustrations).

4.3.1 Occurrence of PiT Encounters

The primary research question (RQ 1) examines if the teacher has experienced Pitt, if any, what is the testing frequency and what is the frequency of the three structures tested. Participants received six mini-courses, each of which asked three questions about self-awareness, student attention and responsive behavior. To maximize the length of the study, it contains only six small events, so each version contains six elements. Participants were first asked to read a section of the World Journal and answer three related questions. In order to avoid societal expectations, some demand the absence of right or wrong answers. The content of these three questions is different, so use the indicators of the three units in the toolbox as appropriate representatives of private actors. Each question requires participants to assess how often they experience this feature on the Likert 5 scale (as shown in the example in Figure 3).

4.3.2 Meanings Attributed to PiT

We studied Professor Pitt's understanding by presenting a small anecdote to the participants. Participants told about the students' experiences in the classroom and measured their significance with 12 elements (RQ 2). The participants considered their teaching experience as measured by eight objects (RQ3). In the qualitative study, all values related to teacher and pupil attendance experience, even if mentioned only once, are recorded as indicator 22. A five-point Likert scale was employed for participants to rate their alignment with these values (a sample of a dichotomous item is depicted in Figure 4). For these two sets of values, the option "Specify Other" has been added to determine unpublished PIT values in a qualitative study.

As our goal is to give teachers a deeper understanding of the general meaning of PIT, six brief segments were assigned to participants in a random fashion. The presumption is that by amalgamating the significance of six distinct vignettes, we can gain a broad understanding of the content taught to Pete. After all, these small events together form various manifestations of legal and legal movements.

4.3.3 Educator-specific Attributes

When examining question 1, supplementary inquiries regarding gender, age, teaching tenure, and participant topics were incorporated to examine the correlation between self-perception, focus on students, reactive actions, and the specific frequencies of the teacher.

4.3.4 Soundness and Dependability

Throughout every phase of the research and development procedure, a 24-hour professor, three specialists, and all relevant elements confirmed the dependability of the research material and implemented enhancements until substantial proof of efficacy was achieved. The content validity study evaluates the PIT sampling of the entire project as a shared content area (sampling validity); Six specific elements were evaluated based on students' level of self-awareness, attention level and response behaviour (course effectiveness), as well as their significance, relevance and interest to teachers (facial effectiveness). In the final phase, three experts, eight teachers and all authors validated the effectiveness of the content. Given the current state of the research and the emergence of the PIT concept, the structural competence of the research has not yet been validated.

In addition to efficiency measurements, an extensive reliability analysis was carried out after management. Measuring the internal consistency of the three structures shows that the self-perception of the six elements related to each structure of Cronbach's alpha is 0.551, self-perception of student attention 0.650, and self-perception of reactive behavior 0.655. The overall internal consistency of PIT is indicated by a Cronbach's alpha of 0.839 across 18 items. Generally, values exceeding 0.8 are deemed suitable for research applications. Low alpha levels in all three structures do not mean that research is useless. When this tool is used to evaluate individuals, high alpha values are considered desirable (Cronbach, 1951). On the contrary, our research aims to better understand the experience of PIT in teaching groups, Taber (2018) posits that a high alpha is not strictly essential. Consequently, we deem the research instrument suitable for accomplishing the goal.

4.4 Data Analysis

When the survey was completed, 258–228 respondents' data were analyzed. After the survey, the response rate decreased slightly (section 1). PIT Experience, Episode 2. Teachers believe that PIT has a significant impact on students' teaching experience. The teacher believes that Pete's teaching experience is important to them; The examination of the teacher's characteristics in section 3 was conducted using SPSS version 26.0. We incorporated exclusion criteria in all statistical analysis procedures, and if there are no values in variables or factors, the whole situation is deleted.

4.4.1 Is there an occurrence of presence in teaching among teachers within their classrooms, and if so, with what frequency? (RQ 1)

Based on the evaluation of these three structures, they determined whether they lived in Pitt and how long they lived. To do this, initially, compute a novel variable for every framework by amalgamating the six components linked to each framework (one component per decimal place). Synthesize these outcomes and determine the incidence of participants' PIT assessments. We are frequently in pursuit of outliers. The findings reveal that for the three structures and PIT, roughly 95% of the Z scores fall

within two standard deviations. No Z scores exceeding three standard deviations were identified, suggesting that the variation of the variable is not markedly significant. All three structures have small deviations and spikes indicating normal distribution.

Run a t-test with Cohen D to find out if there is a significant difference between the participants' average PIT and one average, indicating that there is no average PIT in the first year.

4.4.2 What significance do teachers ascribe (primarily) to PiT regarding students' in-class experiences (RQ 2) and their own teaching experiences (RQ 3)?

To determine the different levels of participants for PIT class experience and class experience, new variables were calculated for each value by combining the results of each value with six small event groups. Off-spec sampling suggests that roughly 95% of these variables' values lie within two standard deviations. No values exceeding three standard deviations were detected, indicating that the deviation of the variable is not significant. The z-values of the deviation and peak are above 1.95 in almost all directions, indicating uneven distribution. For these variables, we used internal variance analysis to classify teachers based on their PIT values, taking into account the students' experience in the classroom and their own teaching experience.

Analysis of differences within research subjects requires a balanced set of small events. In other words, teachers' specificities should be evenly distributed among six thumbnails. Therefore, we performed random tests employing one-way ANOVA and mapping analysis. To accomplish this, compute a fresh set of variable incidents. The Leven test showed that age and teaching experience were not significantly affected, indicating consistent differences. Although the F-statistics are in breach of normal assumptions, they are stable for samples of this size (45). Conversely, the analysis of variance did not reveal statistically significant disparities in age and teaching tenure among the six smaller clusters, and the results were not very effective. According to the map analysis, there was no statistically significant variation in gender between the six minor event groups and the participants, as gender had a relatively small impact and learning participants had a relatively small impact. The results show that teachers' characteristics are evenly distributed among the six smaller action groups.

The answer to the question "Please Define Other" is coded to reflect the significance of the students' classroom experience or their own experiences with Pitt students. Coding these answers can provide a more detailed understanding of the values listed in the array problem. The number of times different participants gave similar answers was then calculated.

5. Results

The research outcomes are structured in alignment with the trio of investigative queries.

5.1 Examining whether Educators Experience PiT and, if so, How Frequently

Table 2 presents the average, standard deviation, and range of mean scores for PIT and its three components: confidence, attention to pupils and reactive behavior. Get PIT results by taking the average of the three structures.

Table 2. Statistical Descriptions for Classroom Presence and Its Trio of Dimensions (N=258)

Construct	Mean	SD	Minimum	Maximum
Classroom Presence	3.66	0.55	2.21	4.56
Self-Recognition	3.60	0.48	2.09	4.95
Attention to Students	3.48	0.49	2.09	4.94
Reactive Behavior	4.48	0.49	1.78	4.75

The sample test confirms that, assuming that all teachers have experience of PIT, the average value of all participants in PIT deviates significantly from the 'no grade' value (response scale 1). D According to Cohen's measurements, this effect is 0.45, which is seen as a minor or moderate impact. The mean of the PIT scale exceeds the midpoint of the scale (i.e. 3, "equivalent").

For all three structures, the sample established that there was a notable disparity in the average degree of self-assurance, student-centred and responsive individuals compared to those who did not participate. D Cohen's measurements show effect sizes of 0.51, 0.50 and 0.55, representing the average effect.

The relationship between teaching experience and the specificities of the three structures was studied using linear regression. Based on our research data, we use reverse limining to minimize the risk of type II errors. Reverse selection determines the probability that the predicate is removed. It includes three factors: gender, study time and discipline. The survey topics are divided into three groups, such as linguistics, STEM and social sciences, followed by virtual coding. Age is not factored in as it correlates with teaching tenure. In the methodological section, we detailed the assumption of normalcy in the absence of univariate outliers. Other hypotheses of linear regression were studied before analysis. All predictive factors have acceptable tolerances and VIF values, indicating that a multidimensional hypothesis still exists. In addition, Cook's distance was tested for multiple anomalies. In the analysis, the cooking distance without variables is greater than 1 and the maximum cooking distance is 0.45, indicating that there is no inappropriate effect on the model. The results show that each entity has four models (see Table 3). The reverse exclusion method eliminates small independent variables with the smallest correlation. Therefore, each building model 4 presents the most relevant independent variables for the individual design. When examining normalized values in these final models, no clear correlation between independent variables and confidence was observed. The study has found a significant correlation between gender and students, but the effect is relatively small. Women pay more attention to students than men, and gender accounts for only 1.6% of teachers' differences in attention to students' experiences. Studies have shown a significant correlation between learner learning and response behaviour, but at relatively low exposure levels. The response of STEM teachers is slightly lower than that of social research teachers, which explains only 2.3% of the difference in teacher response experience.

Table 3. Regression Analyses Exploring the Links between the Dimensions of Classroom Presence and Characteristics Specific to Teachers

Model	Educator-specific attributes	R ²	Adj R ²	R ² Change	F	F Change
1	Teaching experience, Gender, Languages, STEM	0.020	0.008	0.021	1.288	1.277
2	Gender, Languages, STEM	0.019	0.010	-0.005	1.658	0.208
3	Languages, STEM	0.016	0.010	-0.005	2.249	0.466
4	STEM	0.028	0.008	-0.006	3.443	1.039
<i>Construct: Self-consciousness</i>						
1	Teaching experience, Gender, Languages, STEM	0.035	0.019	0.035	1.997	1.992
2	Gender, Languages, STEM	0.035	0.025	0.001	2.633**	0.032
3	Gender, STEM	0.028	0.021	-0.005	3.577**	0.777
4	Gender	0.018	0.0114	-0.008	4.718**	2.415
<i>Construct: Student-Centric Attention</i>						
1	Teaching experience, Gender, Languages, STEM	0.036	0.019	0.035	2.039**	2.038
2	Gender, Languages, STEM	0.033	0.030	0.002	2.722**	0.004
3	Languages, STEM	0.028	0.020	-0.006	3.544*	1.102
4	STEM	0.030	0.022	-0.005	6.497*	0.594
<i>Construct: Acting responsively</i>						

Note. * $p < .05$. The method of backward elimination was employed. 'Social studies' serves as the reference group for the teaching subject.

5.2 What Significance do Teachers Ascribe (Primarily) to PiT Regarding Students' in-class Experiences?

Table 4 illustrates the importance of students' classroom experience or average grades from top to bottom to better understand what teachers consider important about PIT content. An internal analysis of variance was conducted to ascertain if there were notable disparities in the values. The mochi test shows that the spherical hypothesis is not fulfilled. Therefore, a spherical assessment of the greenhouse's resting source corrects degrees of freedom. Despite breaching normal assumptions, the size of the F-STAT sample remained stable (51, 52). Variable aberration is not a problem.

The findings indicated a significant difference between the two values, with a moderate effect size of 53. We then use internal subjective benchmarking tests to check if there are significant differences in continuity values.

Based on participants' internal benchmarks, simplified investments can be created by grouping on the basis of significant differences in averages (line lines in Table 4). It can be divided into five different meanings. The first level includes the meaning of interest. The second level contains values from level 2 to level 7 with the same classification. The ordering includes all aspects concerning students' individual maturation. The third level consists of eight levels, and Deville believes he has a thorough understanding of this theme. The fourth level has two meanings: the challenge of the student experience and the feeling of preparing for the exam. Teachers believe that PIT is the least important because students find it difficult to reach fifth place.

Table 4. Ranking of the Significances for Students' in-class Experiences as Teachers Linked Them to PiT Based on Their Mean Scores, and a Within-subjects ANOVA to Assess if This Ranking was Substantial (N=247)

Descriptive statistics	Within-subjects contrast results					
	Level ^a	Mean	SD	Contrasts	F	Df
1 Being interested	4.11	.93	1 vs 2	20.55**	5.45	.079
2 Feeling free	3.85	1.08	2 vs 3	.10	5.48	.002
3 Gaining a deeper understanding of themselves	3.68	.95	3 vs 4	.03	5.28	.001
4 Acquiring fresh viewpoints on the world	3.66	.85	4 vs 5	3.10	5.45	.015
5 Experiencing self-confidence	3.60	.91	5 vs 6	.02	5.40	.001
6 Dev.respect for other(s)/views	3.66	.98	6 vs 7	.03	5.35	.001
7 Putting the SM ^b into context	3.60	1.06	7 vs 8	5.98**	5.35	.026
8 Dev. ^b deep understanding of SM	3.55	1.05	8 vs 9	32.11*	5.48	.120
9 Experiencing frustration	2.83	1.09	9 vs 10	.55	5.33	.001
10 Feeling prepared for a test	2.68	.98	10 vs 11	.60	5.35	.003
11 Experiencing insecurity	2.71	1.18	11 vs 12	5.29***	5.26	.020
12 Experiencing too much difficulty	2.55	1.09				

Note.* $p < .05$, ** $p < .001$. The dashed lines distinguish rankings that significantly differ from one another. SM = Subject matter; Dev. = Developing

The importance of PIT in determining the teaching experience of students who do not have the ability to perform in qualitative research. Add the question 'Other, specify'. 41 teachers added new meanings, 6 teachers described the meaning of interest in more detail and highlighted differences between students in class. To simplify the data, classify and code the responses. Table 5 summarises the value added codes and their borrowing frequency. The added value of teacher reports and certain features of student participation are very similar.

Table 5. Supplementary PIT-related Significances of PIT for Students' in-class Experiences, as Identified by Teachers in Reaction to the Six Scenarios (N=247)

Additional Meanings Codes	Frequency
Intrigued/Experiencing Awe	5
Feeling Joy	6
Sense of Vulnerability (as students seek correct answers)	5
Enhanced Unity Among Students	2
Enhanced Unity Between Students and Teacher	5
Displaying Evasive Actions	2
Experiencing Miscommunication	4
Deliberately Engaging with the Content	4
Deliberately Engaging with the Content	3
Willingness to Participate	3
Feeling of Contributing to the Classroom	4
Sense of Being Noticed and Recognized	5
Openness to the Subject Matter	2
Taking Charge of Their Own Learning Process	2
Cultivating Reflective Abilities	2
Learning to Support Their Opinions	2
Experiencing Inactivity	2

5.3 What Significances in Their Teaching Experiences do Teachers Primarily Ascribe to PiT?

Table 6 shows how important it is for their teaching experience to understand the importance of IPT for teachers in descending average order. The participants were subjected to an internal variance analysis to check whether the investment was statistically significant. The mochi test shows that the spherical hypothesis is not fulfilled. Therefore, a spherical assessment of the greenhouse's resting source corrects degrees of freedom. Despite breaching normal assumptions, the size of the F-STAT sample remained stable (51, 52). Variable aberration is not a problem.

Table 6. Ranking of the Significances for Their Teaching Experiences that Teachers Linked to PiT Based on Their Average Scores, and a Within-subjects ANOVA to Determine if This Ranking Held Significance (N=242)

Descriptive statistics	Intra-subject comparison outcomes					
	Level	Mean	SD	Contrasts	F	Df
1 Enjoying teaching	4.44	1.05	1 vs 2	.05	3.10	.001
2 Learning things myself	4.33	.71	2 vs 3	9.50***	3.10	.033
3 Experiencing this as the core of education	4.04	.90	3 vs 4	7.09***	3.11	.031

4 Feeling confident	3.88	1.05	4 vs 5	49.85*	3.08	.170
5 Experiencing time pressure	3.03	1.28	5 vs 6	.97	3.09	.003
6 Experiencing teaching as complex	2.91	1.35	6 vs 7	31.12*	3.09	.112
7 Experiencing emotional pressure	2.44	1.21	7 vs 8	7.23***	3.09	.031
8 Experiencing fatigue	2.28	1.24				

Note. * $p < .01$, ** $p < .001$, The dashed lines demarcate the distinctions between significantly disparate rankings.

The results showed a significant difference in continuity values, impact size 53. We then use internal subjective benchmarking tests to check if there are significant differences in continuity values.

Based on researchers' internal benchmarks, simplified investments can be created by grouping on the basis of significant differences in averages (as shown in the line in Table 6). It can be divided into six different meanings. Personal enjoyment of learning comes first, so it's also the most important thing for Pete. Secondly, I believe that this is the core of learning and, thirdly, I trust it. The impact difference between third and fourth places is not significant, 53. Lower levels 4, 5 and 6 have a complex teaching experience; Fatigue is the lowest in the ranking, so it is the lowest in the well.

In order to clarify other meanings related to PiT in teachers' teaching experience, the survey includes the question "Other, specify". Thirteen teachers added new meanings, and one teacher explained in detail the meaning of the concept of "experiential learning is difficult", stressing that it is a positive experience. To simplify the data, classify and code the responses. Table 7 summarises the value added codes and their frequency of reference.

Table 7. Novel Significances Attributed to PiT within the Educators' Teaching Experiences, as Recognized by Teachers in Reaction to the Six Scenarios (N=242)

Additional Significance Codes	Frequency
Enhanced Bond with Students	6
Feeling Anxious about Meeting Lesson Goals	5
Experiencing Stress	2
Sense of Responsibility	2
Self-Discovery	4
Experiencing Ease	2

6. Final Thoughts and Dialogue

This research investigated the manner and degree to which a substantial sample of randomly chosen Dutch secondary school educators recognized PiT as a phenomenon and what they primarily ascribed to PiT. Above all, it was observed that all teachers have, to varying degrees, experienced the PiT

threshold (each form has three structures), and on average only more than half of the PIT courses. This also shows that teachers who are not familiar with Pete's concept or feeling introduce them to Pete's experience through various jokes, which improves the effectiveness of Pete's conceptualization. The study also found that teachers did not experience Pitt in almost half of the courses. Although there is a clear correlation between the specificity of some teachers and the focus on pupils' experiences and response behaviour, the specificity of these teachers can only explain the differences in teacher experience to a very limited extent, as teacher specificity is only 1.6%. The rate of change is 2.3% and the impact is relatively small.

Secondly, regarding the importance of students' classroom experience, it was found that teachers consider interest to be the most important importance of Pita. Secondly, the feeling of freedom is related to the personal development of students and the localization of the theme. A reasonable determination of PIT means that Devel believes that people have a deep understanding of the subject. Test preparation and complex student experiences are the least common PIT values (see Table 4). This is consistent with qualitative research results that show that teachers' focus on attendance covers the overall development of students and are most concerned about their own development. Most of the added value of answering teachers' open questions relates to student participation.

Thirdly, regarding the importance of PIT for personal teaching experience, we note that satisfactory teaching experience is mainly due to PIT, and a minimum teaching experience is necessary. In a satisfactory learning experience, the happiness of teaching is highest, followed by the essence of teaching and self-confidence. In complex trials, moderate PIT refers to a sense of time pressure, while values associated with other complex trials are considered least PIT (see Table 6).

Based on these results, we can demonstrate to students what educators find fulfilling and consider as the core of teaching: its role in fostering student involvement and holistic growth. This corroborates prior qualitative studies that suggest a connection between educators' presence and their dedication to student progress and overall development. Thus, PIT contributes to the achievement of objectives 35 and 54 of general education for all children. Other impacts of the report include concerns and nervousness about price targets, thus, the association between educators' time constraints and mental education might to a lesser degree suggest that teachers also grapple with conflicts between mental education and academic goals.

We believe that in the current growing shortage of teachers, these ideas about the importance of PIT are particularly important. The capacity to exert a substantial influence on the lives and growth of individuals aged 55 to 57 is a crucial incentive for joining and remaining in the educational field. Teachers are primarily dedicated to the development and well-being of their students. Other impacts of the report include concerns and nervousness about price targets, hence, the correlation between educators' time constraints and mental education might, to a limited degree, suggest that teachers also face strains between mental education and educational objectives.

We believe that in the current growing shortage of teachers, these ideas about the importance of PIT are

particularly important. Possessing the capacity to profoundly influence the lives and growth of individuals between the ages of 55 and 57 serves as a vital incentive for pursuing and maintaining a career in education. Teachers are primarily dedicated to the development and well-being of their students. A study conducted by Yinon and Orland Barak (2017) revealed that the primary reason for teachers' fluctuations in their career was the inability to significantly impact students' lives. Disability is often linked to the tense relationship between teachers' professional skills, academic performance and exam culture. Therefore, the study presented by Kelchtermans (2017) on the existence of teaching and its correlation with satisfactory teaching experiences helps to understand that teacher mobility and retention are issues of the education system. Education policy and schools as an organisation play a crucial role in creating an environment conducive to the formation of learning opportunities. Our study also indicates that PIT is deemed valuable incidentally in documenting teacher collectives and is seen as beneficial for children's holistic growth and their own fulfilling teaching encounters.

6.1 Merits, Constraints, and Prospects for Future Inquiry

The study's merit lies in its meticulous and transparent construction, utilizing small examples and appropriate survey points derived from previous qualitative research spanning 2-5 studies. These jokes include, but mostly implicit aspects of teaching research experienced by teachers in their daily practice, such as the simultaneous and interdisciplinary nature of the three PIT structures. Therefore, we demonstrated how complex statistical analysis can be used for large-scale research and empirical analysis of complex concepts such as PIT. However, we continue to rely on teachers' shared understanding of small events and suggest that their understanding of these possible aspects may be too early to study in the future. This may include identifying differences between teachers and examining whether certain PIT structures are better suited to certain values than others, or whether these three structures are crucial for teachers to identify all (best) values. Another benefit is that the sample size is adequate for statistical analysis and represents a cohort of secondary educators in the Netherlands, facilitating the dissemination of research findings. We recommend further investigation into this concept, its origins, and its relevance to other diverse fields, such as sports, arts education, and practical subjects like cooking or woodworking.

Recent research has distinctly demonstrated that PIT is associated with positive experiences and intricate interactions between students and teachers, albeit to a lesser extent, and given the real concern about teacher retention, we suggest that this complex experience be better reflected in future PIT research. In addition, the Parties should systematically review the obstacles and conditions for the legal and fair treatment of schools and classrooms.

There are limitations to the investigation. First of all, we understand the frequency of PIT in the classroom, but we don't know how often teachers experience PIT in the classroom: does PIT refer to short-term learning or reflect subtle and continuous experiences in the classroom? Secondly, as linear regression shows, Kronbach's alpha values in three PIT structures are below 0.8, indicating a high reliability factor, resulting in a low reliability factor between PIT experience and teacher specificities.

Later studies on this relationship can use structured design methods to develop thumbnails to increase the number of thumbnails, bringing the total number of projects to 22. This can provide higher alpha values for all three structures. Related concepts such as mindfulness in learning and adaptive learning by measuring can be used to assess the structural validity of empirical measurements of PIT frequency in questionnaires.

Furthermore, we can ascertain the value of the findings by employing data triangulation methods, such as consulting with experts and educators to grasp their interpretation of the outcomes, or by correlating the observations of several educators across various classes with PiT to comprehend the significance of the results. In addition, we require a more profound comprehension of the ways and reasons why teachers ascribe specific significances to Peter, such as learning and perceiving matters independently, which is the core of learning. This also applies to why students' personal development values are typically classified in PIT, while students' academic learning values are classified lower. Our research shows that teachers can experience exciting connections between PIT and the external goals of compulsory education. We still lack an in-depth understanding of the relationship between field experience, curriculum, education policy or exam responsibility. In addition, the relationship between PIT and teacher engagement (ethics) has not yet been studied. Our conclusions form the basis for examining these relations. Future study of hybrid methods can address the above questions and develop Pita's theory of the roots of the living world for both teachers and students. Ultimately, the role of the law in the six anecdotes might to a certain degree mirror the traits of the Dutch educational framework and cultural context. In various day-to-day classrooms, the manifestation and operation of PIT can inherently be contingent on diverse educational and cultural paradigms. Our study implies that by studying PET, we highlight the teacher experiences that reach the heart of teaching. Therefore, we propose studying law and law in a broader international context, educational scholars can leverage this research and its preliminary investigations to examine PIT, ensuring sensitivity to the nuances of daily teaching within the educational and cultural milieu.

6.2 Significance of the Study for Instructional and Educational Application

First, a better understanding of PIT teachers can help them understand their attention, awareness and responsiveness in daily teaching practice and their importance. Our PIT concept can provide a basis for reflection and keep teachers responsible for their own decisions and decisions. This may be because, on average, almost half of PIT courses lack experience. While teachers bring different positive meanings to themselves and their students, it can mean that there is another world to overcome. A portion of the esteemed research concentrates on nurturing educators' PIT skills. This body of work underscores the significance of reevaluating 4.67 and engaging in conversations with peers to foster PIT. Our study offers the necessary insights and terminology for such contemplation and discourse. This is crucial, as PiT is a phenomenon that teachers intuitively recognize during pivotal learning experiences that remain obscure or challenging to access. Pete's language and knowledge can guide us in critical thinking about teaching practices. In particular, anecdotes and inquiries can act as an entry point for discussions and

introspection within regular practice, as well as for educators' professional growth and within teacher training initiatives. With a focus on teacher education, PIT can assist both students and educators in gearing up for the fluid and context-dependent aspects of instruction, as well as the complexity, fragility and values associated with it. In addition, it can help them become professionals who think, feel, judge and act. Ultimately, this can aid them in comprehending their motivation for pursuing teaching; it can also assist seasoned educators in rediscovering their initial reasons for entering the profession. This can help them maintain motivation and avoid giving up.

Responsibility training with an increasing emphasis on auditing can replace training values that are not reflected in results, assessments or measurable objectives. Through this study, we investigated different aspects of teaching, including predefined learning goals, and goals related to the development of broader educational values that result from meaningful student engagement and interaction with teachers. Therefore, our research helps to understand and understand the primary responsibility of teachers in understanding and utilizing current learning times.

References

- Anderson, R. J. Q. P., Intuitive inquiry: Inviting transformation and breakthrough insights in qualitative research. 2019, *6*(3), 312. <https://doi.org/10.1037/qup0000144>
- Awang M M, Hashim A T M, Hua T K, et al. Observations of Strategies Used by Secondary School Teachers in Physical Classrooms to Promote Positive Behaviour. *Sustainability*, 2022, *14*(12), 7013. <https://doi.org/10.3390/su14127013>
- Barer-Stein, T. J. C. J. f. t. S. o. A. E., On the meaning of learning: Reflections with Dewey. 1987, 25-50. <https://doi.org/10.56105/cjsae.v1i1.2961>
- Barnhart, T., van Es, E. J. T., Education, T., Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking. 2015, *45*, 83-93. <https://doi.org/10.1016/j.tate.2014.09.005>
- Bates, R. H., Modernization, ethnic competition, and the rationality of politics in contemporary Africa. In *State versus ethnic claims*, Routledge: 2019; pp. 152-171. <https://doi.org/10.4324/9780429307485-9>
- Becker, K., Heilmann, C., Peters, G. J. C. m. r., Coagulase-negative staphylococci. 2014, *27*(4), 870-926. <https://doi.org/10.1128/CMR.00109-13>
- Beltramo, J. L. J. T., Education, T., Developing adaptive teaching practices through participation in cogenerative dialogues. 2017, *63*, 326-337. <https://doi.org/10.1016/j.tate.2017.01.007>
- Biesta, G. J. E. J. o. e., What is education for? On good education, teacher judgement, and educational professionalism. 2015, *50*(1), 75-87. <https://doi.org/10.1111/ejed.12109>
- Biesta, G. J. E. t., Risking ourselves in education: Qualification, socialization, and subjectification revisited. 2020, *70*(1), 89-104. <https://doi.org/10.1111/edth.12411>

- Biesta, G., Heugh, K., Cervinkova, H., Rasiński, L., Osborne, S., Forde, D., Wrench, A., Carter, J., Säfström, C. A., Soong, H. J. E. P., Theory, Philosophy of education in a new key: publicness, social justice, and education; a South-North conversation. 2022, 54(8), 1216-1233. <https://doi.org/10.1080/00131857.2021.1929172>
- Blanca Mena, M. J., Alarcón Postigo, R., Arnau Gras, J., Bono Cabré R., Bendayan, R. J. P., , vol. 29, num. 4, p. 552-557, Non-normal data: Is ANOVA still a valid option? 2017. <https://doi.org/10.7334/psicothema2016.383>
- Boone, C., Bado, A. B., Dion, A. M., et al. Push, pull and push-back to land certification: regional dynamics in pilot certification projects in Côte d'Ivoire. *The Journal of Modern African Studies*, 2021, 59(3), 247-272. <https://doi.org/10.1017/S0022278X21000124>
- Browes, N., Altinyelken, H. K. J. T. B. J. o. S., Professionalism in the era of accountability: Role discrepancy and responses among teachers in the Netherlands. 2022, 73(1), 188-205. <https://doi.org/10.1111/1468-4446.12917>
- Chen, J., Yang, Y., Xu, F., et al. Factors influencing curriculum leadership of primary and secondary school teachers from the perspective of field dynamic theory: An empirical investigation in China. *Sustainability*, 2021, 13(21), 12007. <https://doi.org/10.3390/su132112007>
- Cochran-Smith, M. J. T., education, t., Learning and unlearning: The education of teacher educators. 2003, 19(1), 5-28. [https://doi.org/10.1016/S0742-051X\(02\)00091-4](https://doi.org/10.1016/S0742-051X(02)00091-4)
- Cohen, A. J. O. R. o. E., Martin Buber and changes in modern education. 1979, 5(1), 81-103. <https://doi.org/10.1080/0305498790050108>
- Colombetti, G. J. A. S. M. t. E. M., The feeling body. 2014. <https://doi.org/10.7551/mitpress/9780262019958.001.0001>
- Cook, R. D., Weisberg, S. J. S. m., Criticism and influence analysis in regression. 1982, 13, 313-361. <https://doi.org/10.2307/270724>
- Darling-Hammond, L., Cook-Harvey, C. M. J. L. P. I., Educating the Whole Child: Improving School Climate to Support Student Success. 2018. <https://doi.org/10.54300/145.655>
- Darling-Hammond, L., Cook-Harvey, C. M., Flook, L., Gardner, M., Melnick, H., *With the whole child in mind: Insights from the Comer School Development Program*. ASCD: 2018.
- Darling-Hammond, L., *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press: 2015.
- Dogan, E., Taspinar, N., Gokmenoglu, K. K. J. E., Environment, Determinants of ecological footprint in MINT countries. 2019, 30(6), 1065-1086. <https://doi.org/10.1177/0958305X19834279>
- El-Masri, M., Hussain, E. M. A. J. J. o. E. I. M., Blockchain as a mean to secure Internet of Things ecosystems—a systematic literature review. 2021, 34(5), 1371-1405. <https://doi.org/10.1108/JEIM-12-2020-0533>
- Elyamani, R., Nour, O., Singh, R., et al. The effectiveness of the WHO school mental health package in promoting mental health literacy among secondary school teachers in Qatar: a randomized

- controlled trial. *BMC Public Health*, 2024, 24(1), 1883. <https://doi.org/10.1186/s12889-024-19263-6>
- Fang G, Zhou X, **n Y, et al. Mental Health of Primary and Secondary School Teachers in the Remote Mountain Areas. *Medicina*, 2023, 59(5), 971. <https://doi.org/10.3390/medicina59050971>
- Flores, M. A., Niklasson, L. J. J. o. E. f. T., Why do student teachers enrol for a teaching degree? A study of teacher recruitment in Portugal and Sweden. 2014, 40(4), 328-343. <https://doi.org/10.1080/02607476.2014.929883>
- Frank, D., Joo, S.-T., Warner, R. J. K. j. f. f. s. o. a. r., Consumer acceptability of intramuscular fat. 2016, 36(6), 699. <https://doi.org/10.5851/kosfa.2016.36.6.699>
- Fransson, G., Frelin, A. J. T., Teaching, Highly committed teachers: What makes them tick? A study of sustained commitment. 2016, 22(8), 896-912. <https://doi.org/10.1080/13540602.2016.1201469>
- Frelin, A., Fransson, G. J. I. J. o. E. M., Principals' experiences of changes in relationships with newly qualified teachers resulting from a teacher registration reform. 2019, 33(4), 556-568. <https://doi.org/10.1108/IJEM-02-2018-0076>
- Gao, X., Cheng, M., Zhang, R. The relationship between physical activity and the health of primary and secondary school teachers: the chain mediating effects of body image and self-efficacy. *BMC Public Health*, 2024, 24(1), 562. <https://doi.org/10.1186/s12889-024-17914-2>
- Hargreaves, A. J. T., education, t., The emotional practice of teaching. 1998, 14(8), 835-854. [https://doi.org/10.1016/S0742-051X\(98\)00025-0](https://doi.org/10.1016/S0742-051X(98)00025-0)
- Hawkins, R. A., Miller, A., Cremer, J. E., Veech, R. J. J. o. n., Measurement of the rate of glucose utilization by rat brain in vivo. 1974, 23(5), 917-923. <https://doi.org/10.1111/j.1471-4159.1974.tb10743.x>
- Hennessy, J., Mannix McNamara, P., At the altar of educational efficiency: Performativity and the role of the teacher. 2013.
- Joseph N, Mahato V, Pandey A, et al. Experiences and perception towards reproductive health education among secondary school teachers in South India. *Reproductive health*, 2021, 18, 1-10. <https://doi.org/10.1186/s12978-021-01224-6>
- Kelchtermans, G., Continuing professional development: Negotiating the zip. In *The Palgrave handbook of teacher education research*, Springer: 2023; pp. 551-574. https://doi.org/10.1007/978-3-031-16193-3_63
- Kim, T.-H., Kim, I.-H., Kang, S. J., Choi, M., Kim, B.-H., Eom, B. W., Kim, B. J., Min, B.-H., Choi, C. I., Shin, C. M. J. J. o. g. c., Korean practice guidelines for gastric cancer 2022: an evidence-based, multidisciplinary approach. 2023, 23(1), 3. <https://doi.org/10.5230/jgc.2023.23.e11>
- Lewallen, T. C., Hunt, H., Potts-Datema, W., Zaza, S., Giles, W. J. J. o. S. H., The whole school, whole community, whole child model: A new approach for improving educational attainment and healthy development for students. 2015, 85(11), 729-739. <https://doi.org/10.1111/josh.12310>

- Li, C., Xu, J. The sustainability of form-focused instruction in classrooms: Chinese secondary school EFL teachers' beliefs and practices. *Sustainability*, 2023, 15(7), 6109. <https://doi.org/10.3390/su15076109>
- Li, J., Ju, S. Y., Kong, L. K., et al. A study on the mechanism of spiritual leadership on burnout of elementary and secondary school teachers: The mediating role of career calling and emotional intelligence. *Sustainability*, 2023, 15(12), 9343. <https://doi.org/10.3390/su15129343>
- Liang, M., Ho, G. W. K., Christensen, M. Living in fear at the unpredictability of mental health issues in the classroom: a phenomenological study of secondary school teachers in encountering students with mental health issues. *Frontiers in psychiatry*, 2024, 15, 1367660. <https://doi.org/10.3389/fpsyt.2024.1367660>
- Liao J, Wang X Q, Wang X. The effect of work stress on the well-being of primary and secondary school teachers in China. *International Journal of Environmental Research and Public Health*, 2023, 20(2), 1154. <https://doi.org/10.3390/ijerph20021154>
- Loughran, J. J. C. i., Pedagogy: Making sense of the complex relationship between teaching and learning. 2013, 43(1), 118-141. <https://doi.org/10.1111/curi.12003>
- Loughran, J., Berry, A. J. T., education, t., Modelling by teacher educators. 2005, 21(2), 193-203. <https://doi.org/10.1016/j.tate.2004.12.005>
- Lowe, M. R., Annunziato, R. A., Markowitz, J. T., Didie, E., Bellace, D. L., Riddell, L., Maille, C., McKinney, S., Stice, E. J. A., Multiple types of dieting prospectively predict weight gain during the freshman year of college. 2006, 47(1), 83-90. <https://doi.org/10.1016/j.appet.2006.03.160>
- Mengistnew M, Sahile A, Asrat D. Examining teachers' self-regulation practice in secondary school science teaching: the case of South Gondar Zone, Ethiopia. *Heliyon*, 2021, 7(11). <https://doi.org/10.1016/j.heliyon.2021.e08306>
- Mercer, N., Howe, C. J. L., culture; interaction, s., Explaining the dialogic processes of teaching and learning: The value and potential of sociocultural theory. 2012, 1(1), 12-21. <https://doi.org/10.1016/j.lcsi.2012.03.001>
- Moore, A., Clarke, M. J. J. o. e. p., 'Cruel optimism': Teacher attachment to professionalism in an era of performativity. 2016, 31(5), 666-677. <https://doi.org/10.1080/02680939.2016.1160293>
- Nwakpadolu, G. M., Ede, M. O., Okoro, J. O., et al. Effect of psychological intervention in cushioning work-induced stress among secondary school home economics teachers: Implications for policy and administration. *Medicine*, 2024, 103(9), e37174. <https://doi.org/10.1097/MD.00000000000037174>
- Onwuegbuzie, A. J., Combs, J. P., Data analysis in mixed research: A primer. 2011. <https://doi.org/10.5296/ije.v3i1.618>
- Pallant, J., *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge: 2020.
- Palmer, R., Kenneth King Robert Palmer. 2010. <https://doi.org/10.4324/9781003117445>

- Parsons, C. A., Sulaeman, J., Titman, S. J. T. J. o. F., The geography of financial misconduct. 2018, 73(5), 2087-2137. <https://doi.org/10.1111/jofi.12704>
- Perryman, J., Calvert, G. J. B. J. o. E. S., What motivates people to teach, and why do they leave? Accountability, performativity and teacher retention. 2020, 68(1), 3-23. <https://doi.org/10.1080/00071005.2019.1589417>
- Raider-Roth, M. B., *Professional development in relational learning communities: Teachers in connection*. Teachers College Press: 2017.
- Rodgers, C. R., Raider-Roth, M. B. J. T., theory, T., practice, Presence in teaching. 2006, 12(3), 265-287. <https://doi.org/10.1080/13450600500467548>
- Rodgers, K. B., Lee, S.-S., Rosenbloom, N., Timmermann, A., Danabasoglu, G., Deser, C., Edwards, J., Kim, J.-E., Simpson, I. R., Stein, K. J. E. S. D., Ubiquity of human-induced changes in climate variability. 2021, 12(4), 1393-1411. <https://doi.org/10.5194/esd-12-1393-2021>
- Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Courtet, P., Guillaume, S. J. I. J. o. E. D., The impact of the COVID-19 pandemic on eating disorder risk and symptoms. 2020, 53(7), 1166-1170. <https://doi.org/10.1002/eat.23318>
- Roefs, A., Fried, E. I., Kindt, M., Martijn, C., Elzinga, B., Evers, A. W., Wiers, R. W., Borsboom, D., Jansen, A. J. B. R., Therapy, A new science of mental disorders: Using personalised, transdiagnostic, dynamical systems to understand, model, diagnose and treat psychopathology. 2022, 153, 104096. <https://doi.org/10.1016/j.brat.2022.104096>
- Roefs, E., Leeman, Y., Oosterheert, I., Meijer, P. J. E. s., Teachers' experiences of presence in their daily educational practice. 2021, 11(2), 48. <https://doi.org/10.3390/educsci11020048>
- Roefs, L. Environmental decision-making within the EU: the dynamics between neoclassical economics and limits to growth. 2023.
- Rushton E A C. Building teacher identity in environmental and sustainability education: The perspectives of preservice secondary school geography teachers. *Sustainability*, 2021, 13(9), 5321. <https://doi.org/10.3390/su13095321>
- Sanderse, W. J. J. o. P. o. E., An Aristotelian model of moral development. 2015, 49(3), 382-398. <https://doi.org/10.1111/1467-9752.12109>
- Schmider, E., Ziegler, M., Danay, E., Beyer, L., Bühner, M. J. M., Is it really robust? 2010. <https://doi.org/10.1027/1614-2241/a000016>
- Sibley, C. G., Greaves, L. M., Satherley, N., Wilson, M. S., Overall, N. C., Lee, C. H., Milojev, P., Bulbulia, J., Osborne, D., Milfont, T. L. J. A. p., Effects of the COVID-19 pandemic and nationwide lockdown on trust, attitudes toward government, and well-being. 2020, 75(5), 618. <https://doi.org/10.1037/amp0000662>
- Tang, X., Yuan, Z., Deng, X., et al., Predicting secondary school mathematics teachers' digital teaching behavior using partial least squares structural equation modeling. *Electronic Research Archive*, 2023, 31(10), 6274-6302. <https://doi.org/10.3934/era.2023318>

- Tarricone, R., Rognoni, C. J. E. H. J. S., What can health systems learn from COVID-19? 2020, 22(Supplement_P), P4-P8. <https://doi.org/10.1093/eurheartj/suaa185>
- Vare P. Exploring the impacts of student-led sustainability projects with secondary school students and teachers. *Sustainability*, 2021, 13(5), 2790. <https://doi.org/10.3390/su13052790>
- Vaughn, V. M., Ratz, D., McLaughlin, E. S., Horowitz, J. K., Flanders, S. A., Middleton, E. A., Grant, P. J., Kaatz, S., Barnes, G. D. J. J. o. t. A. H. A., Eligibility for Posthospitalization Venous Thromboembolism Prophylaxis in Hospitalized Patients With COVID-19: A Retrospective Cohort Study. 2022, 11(19), e025914. <https://doi.org/10.1161/JAHA.122.025914>
- Viladrich, C., Angulo-Brunet, A., Doval, E. J. A. d. p., A journey around alpha and omega to estimate internal consistency reliability. 2017, 33(3), 755-782. <https://doi.org/10.6018/analesps.33.3.268401>
- Wei, X., Chow, M. K., Huang, L., et al. Teacher evaluation in primary and secondary schools: a systematic review of SSCI journal publications from 2012 to 2022. *Sustainability*, 2023, 15(9), 7280. <https://doi.org/10.3390/su15097280>
- Wilkins, J., Schoville, B. J., Brown, K. S., Chazan, M. J. S., Evidence for early hafted hunting technology. 2012, 338(6109), 942-946. <https://doi.org/10.1126/science.1227608>
- Yuan Z, Deng X, Ding T, et al. Factors influencing secondary school teachers' usage behavior of dynamic mathematics software: A partial least squares structural equation modeling(PLS-SEM) method. *Electronic Research Archive*, 2023, 31(9), 5649-5684. <https://doi.org/10.3934/era.2023287>
- Zhou, M., Wang, D., Zhou, L., et al. The effect of work-family conflict on occupational well-being among primary and secondary school teachers: the mediating role of psychological capital. *Frontiers in Public Health*, 2021, 9, 745118. <https://doi.org/10.3389/fpubh.2021.745118>