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Il ciclo riflessivo di Gibbs e la Ricerca-formazione: una proposta di ricerca

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Gibbs' Reflective Cycle and Research-Training: a research model

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Laura Landi – *Università degli Studi di Modena e Reggio Emilia*
Paola Rigoni – *Università degli Studi di Padova*

Abstract

Nell'ambito della formazione il tema della riflessività ha dato origine a un variegato universo di pratiche. Dare valore alla riflessione sull'esperienza significa superare la tradizionale separazione tra teoria e pratica, che vede l'esperienza unicamente come il luogo in cui si applicano saperi e schemi d'azione appresi altrove. Non è semplice raccogliere evidenze di come questo processo riflessivo si inneschi, quali possano essere i livelli del suo sviluppo e che risultati, in termini di cambiamenti e nuove consapevolezze, provochi nei soggetti che vi partecipano. Gibbs (1988) con il suo schema di riflessione sulla pratica suggerisce sei dimensioni di riferimento, che spingono alla riflessione individuale o collettiva. Questo modello, di per sé situato e non generalizzabile a una famiglia di situazioni, presenta delle potenzialità non ancora esplorate. Il presente contributo propone un progetto di ricerca fondato sulla ricerca-formazione che, insieme a docenti di diversi ordini scolastici utilizzi questo modello per l'attivazione, l'analisi e la valutazione di processi riflessivi sul proprio lavoro. Presenteremo il quadro di ricerca, individuando le intenzionalità alla base delle scelte metodologiche. Si analizzerà l'utilizzo di strumenti quantitativi a sostegno del quadro di ricerca qualitativo. L'intreccio di strumenti quantitativi e qualitativi sarà funzionale a sostenere l'esportabilità del processo e supportare la capacità del cambiamento nel docente.

In the field of education, the theme of reflexivity has given rise to a diverse universe of practices. To value reflection on experience is to overcome the traditional separation of theory and practice, which sees experience solely as the place where knowledge and patterns of action learned elsewhere are applied. It is not easy to gather evidence of how this reflective process is triggered, what the levels of its development might be, and what results, in terms of changes and new awareness, it causes in the subjects who participate in it. Gibbs (1988) with his schema of reflection on practice suggests six reference dimensions, which prompt individual or collective reflection. This model, itself situated and not generalizable to a family of situations, has potential that has not yet been explored. This paper proposes a research-training-based research project that, together with teachers from different grade levels, will apply this model for the activation, analysis and evaluation of reflective processes on teachers' actions. We will present the research framework, identifying the intentionalities behind the methodological choices. We will explore the use of quantitative tools to support the qualitative research framework, functional for the exportability of the process and the triggering of changes in teachers.

1. Introduction

Teachers operate as professionals in a dynamic and intricate environment, navigating through various inputs and outputs with limited time for structured observation and reflection-in-action (Schön, 1983). Schools, as social contexts, are environments that teachers have personally experienced as students. Over the years, both before and after entering the teaching profession, teachers develop a habitus – not a mere replication of identical habits, but rather a behavioral grammar that allows individuals to adapt their responses to new situations within the social system.

Shaped by the interplay between the individual and the social context, habitus not only reflects current practices but also structures infinite future behavior, effectively acting as a predictor (Bordieau, 2013). Alongside this "grammar of behavior," teachers' actions manifest in microstructures, present in their practices at a pre-reflective and pre-conscious level, known as

pedagogical formats. These are small, often automated behaviors, such as walking through the desks during tests, which have originated intentionally but are now executed without much conscious consideration of their original purpose (Pentucci, 2018).

Habitus and pedagogical formats share common characteristics: they are tacit, culturally influenced, and recurring behaviors with both individual and social dimensions. For teachers to introduce innovative teaching methodologies and bring about change in the classroom, they must first become aware of these deeply ingrained, often unconscious behaviors. This awareness forms a crucial step before contemplating how and whether to modify them. This presents a significant challenge that effective professional development initiatives must address.

This theoretical contribution proposes a Research-Training approach marked and supported by the use Gibbs' Reflective Cycle. The goal is to facilitate the emergence of teachers' pedagogical format and habitus, support individual and group reflection, find and apply common solutions. The recurrent use of the Cycle throughout the process should allow for the collection of reliable data, thereby enabling a process that is both replicable and comparable. The gains in terms of teachers' perception of their self-efficacy and agency will be measured using two questionnaires.

2. Research-training for teachers' professional development

Research-training (Asquini, 2018) is a methodology of doing research in schools and with teachers, oriented toward training/transforming educational and teaching action and promoting teacher reflexivity (Nigris, et alii, 2021). R-T is based on the creation of a working group made up of teachers, educators and researchers to investigate a research question identified by the participants, based on the relevance for their school context. The research is then carried out by the group, from the definition of methodology and research tools, to the collection of data, to the analysis. Researchers and teachers have different roles in the group. Researchers facilitate the processes, support the group with training and literature, provide tools and grant rigor to the process, while teachers actively participate in every step. Participating in the R-T process helps teachers reflect on their actions. Sharing these reflections, experiencing the research process with the construction of hypotheses, the methodology, helps the emergency of pedagogical formats and habitus, first step toward their transformation (Asquini, 2018).

R-T has the characteristic of a transformative professional development model (Kennedy, 2005) and supports transformative learning (Mezirow,

2016). It is coherent with Guskey's findings, that teachers need to see the efficacy of changes before learning the theory behind them and putting them into practice (2002).

For this efficacy in terms of professional development to happen, the questions researched need to be relevant for the participants, even if they are not new to the literature. The R-T brings new knowledge and understanding to the teachers involved, not necessarily to the scientific community. The promotion of reflective processes and the construction of meaning and answers that become common new knowledge for the whole group, are key components of the R-T. They help the emergency and re-construction of pedagogical format and habitus both at an individual and at a systemic level. This again is a potential guarantee for success: when the change is limited to a single teacher, the effects tend soon to be reversed by the interaction with an unchanged system (Barnes, 1992). Yet, since research questions and the answers are often context specific, results are hard to generalize. The context specificity is a challenge also for duplicability: R-T are often single experiences, very meaningful only for a small number of teachers (Agrusti & Dodman, 2021).

The effect of transformative models of professional development are often measured in changes in teachers' attitudes, beliefs, and subjectivity. We can expect to see changes in teachers' perceived self-efficacy belief as "a judgment of his/her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran and Hoy, 2001, p. 783). The Ohio State teacher efficacy scale (OSTES) is a 10-level (1-10) self-anchoring scale that provides a range of indications of self-efficacy specific to the teaching profession, focusing in particular on: student engagement, classroom management, instructional strategies (Tschannen-Moran & Hoy, 2001).

The other changes triggered by R-T should be on teachers' agency seen as part of his or her engagement with the environment and defined it as «a potential to act through the environment» ((Leijen et alii, 2022, p. 3). This ability to produce effect, in this pragmatist approach, is influenced by individual efforts, resources, and cultural and structural factors. We consider in particular the ecological model of teacher agency that «describes the achievement of agency as a temporal-relational phenomenon through three dimensions: iterational, projective, and practical-evaluative» (ibidem). The iterational dimension captures the past, i.e. the skills, knowledge,understanding acquired in different professional settings; the projective dimension focuses on potential future trajectories, which could identify changes in teachers' beliefs and intentions. The practical-evaluative dimension concerns the ability of teachers to take decisions and act.

> This decision-making process entails that a teacher considers alternatives for action, which are guided by the iterational and projective dimensions and also by the cultural, structural, and material conditions of the present situation. The latter conditions could function as resources, enablers, or constraints for action. For example, collaboration-oriented culture, horizontal relations, and close ties among teachers function as enablers of agency, while competition, performance-oriented culture and hierarchical relations act as constrains for teacher agency (*ibidem*).

Agency and self-efficacy, as defined in our theoretical framework, should capture 2 different sides of the same transformative process. They will complement the qualitative data collected during the training and should help mapping the process.

3. Gibbs' Reflective Cycle

Gibbs' Reflective Cycle, developed by Graham Gibbs in 1988, offers a structured methodology for learning from experiences. This framework provides a systematic approach for examining various experiences, and its cyclic design is particularly suited to the analysis of recurring events. Its cyclical nature allows for insights to be derived and plans formulated based on both successful and unsuccessful experiences. The reflective cycle comprises six distinct stages:

1. Description of the experience: This initial stage involves providing a detailed account of the experience under scrutiny.
2. Exploration of feelings and thoughts about the experience: In this stage, a thorough exploration is undertaken of the emotions and cognitions evoked by the experience.
3. Evaluation of the experience, encompassing both positive and negative aspects: Here, a comprehensive assessment of the experience is conducted, considering both favorable and unfavorable elements.
4. Analysis to comprehend the situation: The fourth stage entails a systematic analysis aimed at understanding the underlying dynamics of the situation.
5. Synthesis of lessons learned and identification of potential alternative actions: At this stage, the insights gleaned from the experience are synthesized, accompanied by reflections on alternative courses of action.
6. Formulation of an action plan for future similar situations or broader changes: The final stage involves crafting a strategic action plan out-

lining how one would approach similar situations in the future, or proposing broader adjustments deemed appropriate.

Gibbs' Reflective Cycle stands as a pivotal instrument in the educational domain, particularly wielding significant influence in the training of teachers. Grounded in the philosophical framework articulated by Schön (1983), this model serves as a catalyst for practitioners, guiding them towards profound reflection on their experiences and encouraging a discerning analysis of the underlying significance inherent in their pedagogical practices. The process of reflective thinking facilitated by Gibbs' model assumes heightened significance for preservice teachers (Oviawe, 2015), acting as a guiding force in constructing a nuanced understanding of the intricacies of teaching and contributing to the formulation of a personalized worldview within the educational landscape (Collier, 1999).

The adaptability of Gibbs' Reflective Cycle is evident in its application to simulation-based education, where it serves as a structured guide during debriefing sessions, fostering reflective thinking among participants (Husebø, 2015). This adaptability extends to innovative approaches and can serve as the initial phase of a training program, demonstrating success in elevating the depth of reflective thinking among aspiring teachers (Koraneekij, 2016). In essence, Gibbs' Reflective Cycle emerges as a versatile and empowering instrument, fostering a culture of contemplative learning and continuous improvement in education (Dubé & Ducharm, 2015). Its multifaceted applications underscore its relevance as a dynamic resource that adapts to various educational contexts, enhancing the quality of reflective thinking and professional growth, and promoting a structured and iterative process of learning and improvement through thoughtful examination of experiences (Sekarwinahyu et al., 2019).

This model proves effective for systematically navigating diverse experiences, whether singular events or recurring situations, such as collaborative team meetings (Adom, 2022). While Graham Gibbs initially recommended its application in repetitive contexts, the stages and principles articulated within the model are equally applicable to standalone experiences. When employed in the context of a singular occurrence, the resulting action plan may assume a more generalized form, contemplating the application of derived conclusions in future scenarios.

4. Our intervention

The contemplation of developing an adaptable educational research toolkit, transferable across diverse contexts, originates from a socio-construc-

tivist theoretical framework. In envisioning a paradigm shift in pedagogical practice, it is necessary to consider the continuous interaction of teachers with various levels of the system (Bronfenbrenner, 2004) and therefore work with them on the individual dimension as well as their relationship with the context. For these reasons, we have chosen tools that can provide them with elements of knowledge and awareness regarding their teaching practices.

The first step of this pilot research involves the engagement of teachers from all three school cycles (students 6-18 y.o.) in Research-Training activities. We will use a snowball sampling technique to try to cover the entire Italian territory, including schools in the north, center, south, and islands. This implies initial remote work and a minimum-maximum number of participants that makes the sample quantitatively representative. We expect to run multiple R-T groups in order to have a balanced number, roughly between 10 and 30, of participants in them. As for the groups composition, they will be mixed for geographical origin, school cycle, and other sociodemographic characteristics. Each diverse group of teachers will be clusterized based on the common challenges faced. Whenever possible we will try to keep teachers coming from the same school together in the R-T in order to support the connection to the context and the daily sharing of praxis and ideas that is typical to research training.

Once the sample has been identified, they will be asked to complete questionnaires. Teachers will compile the Ohio State teacher efficacy scale (OSTES) (Tschannen-Moran and Hoy, 2001) and the Agency questionnaire (Leijen et alii, 2022) both at the beginning and at the end of training. The changes in teachers' perception of self-efficacy and agency will be one of the tools to evaluate training impact.

The R-T will start with the collection of Critical Incident Technique. CIT exploits the knowledge derived from experience as a tangible opportunity to bridge the gap between theory and practice. This enables addressing uncertainty, ambiguity, and change, fostering critical awareness. What is being asked is to describe a moment of difficulty, to find an emblematic event during the teaching action. To activate this process, the reflective cycle checklist by Gibbs will be utilized. Teachers will compile individually the check-list focusing on the question: «What is the most challenging aspect of your profession? Please think of a specific incident and try to analyze it using the following questions».

The Gibbs Reflective Cycle, that comprises six distinct stages, each of which is systematically examined through a comprehensive checklist consisting of twenty-seven probing questions. Each stage corresponds to a set of inquiries tailored to elucidate various facets of the reflective process. Researchers will analyze the reflection and cluster teachers in groups facing

similar challenges, e.g. classroom management, disciplinary knowledge, teaching strategies and so on.

Subsequently, individual reflections will be collated and disseminated during a subsequent plenary session, where researchers will articulate the emergent themes. The analysis of this material will be integrated, considering both contextual and retrospective analysis aspects. These identified themes will then serve as the foundational elements for shaping the overarching research question pertaining to the training. It is important to note that preceding this phase, a meticulous revision of the checklist questions will be undertaken to align the terminology with the specific nuances of the educational context.

The unfolding of the R-T is hard to predict. It is impossible to determine now what the research questions will be and thus the tools and methodology we will use. Each group will find their own research paths. However the initial collection of CIT and the use of Gibbs' Cycle at each specific junction, could form the common framework for all R-T, thus supporting the replicability of the process. The Initial CIT will not only grant the meaningfulness of the research to participants and the construction of a common language within the group. It will constitute a database of practices and challenges that could guide future research.

The combination of these quantitative and qualitative data (Creswell will capture the teachers' attitude in approaching our common research. Namely, Gibbs reflective cycle compiled initially will be shared among participants to become the base for the co-construction of the research question. Capturing teachers' challenges and their emotional and pragmatic approach in facing them will constitute the base for the comparability and replicability of the approach, because we will collect common data. Moreover, participants will compile and share the check-list at specific junctions throughout the R-T . These qualitative data and common reflection will form the net on which future research could be based.

5. Conclusions

In summary, the primary objective of this pilot project is to evaluate the viability of establishing an initial baseline moment (t0) for each R-T, ensuring data uniformity to capture both individual and collective insights. The central emphasis of this initiative lies in the exportability of the process, with the overarching goal of furnishing a coherent rationale for cultivating awareness in teacher identity development. This endeavor serves as a foundational support structure for the R-T. The aspects underlying the methodologies used, which remain consistent, also become exportable.

The second intrinsic purpose is to stimulate curiosity towards oneself and others. As taught by Paulo Freire, curiosity is the cornerstone of the human being. It generalizes in humans the movement towards the knowledge of objects outside of oneself and one's self-awareness.

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