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What Axioms Inform Your Research? Dialogizing for Innovation in English Language and Literacy Pedagogy

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Abstract—On 19 April 2019, The Sony Entertainment Center in Toronto filled with 3,000 people, all ready to listen to what Professor Slavoj Žižek, one of the key western philosophers of the present era, called the “duel of the century.” The popularity of the debate between Slavoj Žižek and Jordan Peterson is reflective of a new yet largely invisible preoccupation by the public at large with intellectual matters engendered by the widespread availability of information technology. Yet, the debate was met with no interest from the field of education, despite the massive interest from the general public. Is there truly nothing that Slavoj Žižek or Jordan Peterson have to offer to education? Or are educators just tired of “philosophising”? This paper does not focus specifically on the debate between Slavoj Žižek and Jordan Peterson, but on the concept of interdisciplinary dialogue as a method for designing innovation that the debate has exemplified. The paper will discuss the process of innovation and will illustrate examples developed by the author together with her postgraduate students. The aim of this paper is to demonstrate the point that a lot can be learned about second language and literacy pedagogy when researchers do not hide behind the illusory walls of disciplines but, instead, venture out to better understand what they do and why.

Keywords—*literacy pedagogy; dialogizing; innovation; english language.*

I. INTRODUCTION

On 19 April 2019, The Sony Entertainment Center in Toronto filled with 3,000 people, all ready to listen to what Professor Slavoj Žižek, one of the key philosophers of the present era in the West, called the “duel of the century” [1]. The event to which Žižek [2] referred was a debate on the subject of Marxism and Happiness between him and Professor Jordan Peterson, a clinical psychologist, who recently rose to fame when speaking against trends that distrust social dialogues as a means by which individual and social ethics develop and shape further dialogues. Three thousand people gathered to listen to the debate. Jordan Peterson was introduced by the MC of the event, Dr. Stephen Blackwood, President of Ralston College, Georgia, as an academic and clinical psychologist, professor of psychology at Harvard University and the University of Toronto; the author of two books and over a 100 peer-reviewed articles; a scholar steeped in Nietzsche, Dostoyevsky and, above all, Carl Jung, whose reading informed his interpretation of

ancient myths, twentieth-century totalitarianism, and, especially, his endeavours to counter contemporary nihilism. Peterson’s 2018 *12 Rules for Life: An Antidote to Chaos* is a bestseller with over 3 million copies sold and has been translated into forty-five languages and published all over the world. Slavoj Žižek, on the other hand, was described by Stephen Blackwood as a philosopher, with two doctoral degrees, one in philosophy from the University of Ljubljana, Slovenia, and the other in psychoanalysis from the University of Paris VIII (Sorbonne). Currently he is a professor at the Institute for Sociology and Philosophy at the University of Ljubljana, and International Director of the Birkbeck Institute for the Humanities at the University of London. Žižek has published more than three dozen books, mostly on the seminal philosophers of the nineteenth and twentieth centuries; he is a “dazzling theorist” and “a global figure” tackling issues of emancipation, ideology, subjectivity and art. Why was the debate on the subject of happiness so important and, specifically, why, do I believe, the debate was important for educators and education research?

The reviews of the debate were polarised, with some analysts criticising Jordan Peterson for his apparent failure to demonstrate a deeper understanding of Marxism not only as it was formulated back in the nineteenth century, but more recently by social theorists and economists. According to his critics, to discuss Marx and any tensions in his theory, including the removal of financial incentives as the primary driver of productivity, one must be well-versed in Marx and socialist/communist studies. These failures, his critics concluded, implied that Peterson’s own expertise was insufficient ground for seriously engaging in a debate on Marxist theories. Were the critics correct?

Consider a different debate. In 1975, Piaget and Chomsky met to debate language and cognition [3]. While the former scholar investigated the development of cognition through observation of children’s intellectual behavior, the latter was an expert on syntax and general implications about the nature of cognition derived from understanding grammar understood as “language” [3]. From Wagner’s review of the debate one can learn that in their writings neither Piaget nor Chomsky referred to the texts of each other or, indeed, their respective conceptual paradigms. Keeping this point in mind, the value of the debate

was not in choosing the right way of seeing the phenomena in question. Rather, it was in the dialogue that the two scholars created that pointed to both converging and diverging elements in their respective theories. The value of the debate was also in the new questions that would have emerged if not necessarily for the two scholars, then possibly for those witnessing, and reading the proceedings of, the debate.

During the Toronto debate [1], Peterson alluded to a process that underpins a dialogue between seemingly incommensurable perspectives, like the one between Piaget and Chomsky. By opening the debate with a critique of the Communist Manifesto, Peterson sought to illustrate that any theory should be a synthesis of many voices, many models or theories, precisely to minimise its own biases and to expand its critical capacities [1]. A dialogue of this kind should enable the parties to confront their truths and establish a common ground, however minimal. Judging by Peterson's critics, intellectual debates involving comparing, breaking, and connecting new and diverse insights are "out of fashion" today. Yet, Slavoj Žižek too followed the format adopted by Peterson. In the course of the debate, the scholars asked of each other questions and clarified perspectives and the evidence on which they built for new perspectives to develop. The outcome was inspiring to those who came to learn from the debate; it was a disappointment to those who wanted to see a winner to emerge.

The popularity of the debate between Slavoj Žižek and Jordan Peterson is reflective of a new yet largely invisible preoccupation by the public at large with intellectual matters engendered by the widespread availability of information technology. Yet, the debate was met with no interest from the field of education, despite the massive interest from the general public. In fact, to date, Peterson's work, his methodology and the concepts and research that his books and lectures offer, appear not being echoed in education publications, especially those dealing with pedagogy. It is said at times that the availability of technology enables everyone to do their own research and thinking, and to be disobedient (or critical, creative, or to think divergently) on a scale never possible before, leading to what some have called community intelligence, intelligence emanating from the harnessed intellectual energies of the masses. Is there truly nothing that Slavoj Žižek or Jordan Peterson have to offer to education? Or are educators just tired of "philosophising"?

This paper does not focus specifically on the debate between Slavoj Žižek and Jordan Peterson, but on the concept of interdisciplinary dialogue as a method for designing innovation. It will discuss the process of innovation and illustrate examples developed as a result of its implementation. The aim of this paper is to demonstrate the point that a lot can be learned about second language and literacy pedagogy when researchers do not hide behind the illusory walls of disciplines. But there are also threats. For example, longstanding "empirical" evidence and facts become undermined when confronted with an array of evidence from neighbouring disciplines that both question and, at times, outright deny the comfort obtained from narrowly defined and ontologically misconstrued studies. The paper will

argue that remaining immune to these external challenges will leave the field outdated, isolated, uncritical, boring and bereft of disciplinary systematicity that, otherwise, characterises research.

On the other hand, overcoming self-imposed limitations, however deeply entrenched, can open access to insights and expertise that can inject new blood into education and help reframe what no longer is novel or exciting.

The new world of communication facilitating interdisciplinary learning is already here. Google alone receives more than 3.5 billion questions a day, enabling interactions between diverse groups, all this indicating that intellectual life is far from dead; it is just hidden. Events like the debate between Žižek and Peterson help bring it to the surface. It is time for education to show its new face too.

A. The Promise of Education Reforms in Indonesia

The 2005 teacher education reform in Indonesia aimed to create foundation for modernising the national education system resulting, *inter alia*, in a better regulated professional teacher degree [4]. The reform introduced the New Standards of Higher Education based on Ministry of Education and Culture Decree No. 49 [5] and was a clear indication that the country has joined the international demand for greater accountability and for competency-based education. Indonesian education graduates are now required to have a command of higher order thinking skills that place emphasis on research and inquiry as processes that support learning and knowledge-building processes in general. Analytical, critical, creative and innovating thinking are some of the key skills emphasised by the new education reform [5]. The policies are in place, but how do Indonesian academics go about embracing the change? Lian and Pertiwi [6] argue that the emphasis of higher order thinking and research skills in undergraduate programs presents many challenges to higher education institutions worldwide, including Indonesia. Designing investigative curricula requires skills that go beyond a passive teaching of "disciplinary content". Specifically, in relation to English language teacher education (ELTE), Lian and Pertiwi say, the "issue is important since there is research that indicates that stagnation begins early, as a consequence of research training and examination practices".

Indeed, one of the strongest critiques of education research comes from Professor Gary Thomas. As Lian and Pertiwi argue [6], Thomas' critique is important due to his extensive contribution to the field as the Executive Editor of *Educational Review*, the co-editor of the *International Journal of Research and Method in Education*, and the *British Educational Research Journal*, all high-ranking journals of education. The central point of Thomas' critique of the research culture in education is that for research to result in innovation, it needs to look for ideas and concepts outside its own disciplinary and/or practice limits; it must take risks and build on new knowledge to build new, unexpected connections that lead to new ways of thinking about problems. To this end, Thomas (Thomas & Pring, p. 3)

encourages “playing with almost any piece of seemingly relevant information” and “drawing eclectically from many and varied streams of information: a bricolage of potential evidence”. However, Thomas argues, this is not what education research does.

According to Thomas [7], education research is much more concerned with “theory development” than with building potentially risky connections. In his view, theory tends to be used as a shell to give value to arguments and observations that otherwise might be perceived as mundane or trivial (p. 143), a practice which, he argues, is further reinforced through research training and research examination practices, that tend to operate as a *regulatory body*, ensuring that “dissent is increasingly rare” and that it is based on *evidence* “supported by 100 references”, thus resting “squarely in the middle lane of orthodoxy” (p. viii). It follows that the way in which educators are trained as researchers compounds the problem. The tendency is, Thomas [7] explains, for education research to treat theory “as if it is to be cherished, not falsified: far from being the intellectual construction to be relentlessly assailed, it is the proud fortress for one’s thinking” [7]. In his view, this reliance on theory development does not serve education well. Thomas [7] describes the research culture in education as introverted, unadventurous and obsessed with “what-is” and “what has-been”, thus “collectively excluding the raw light of new ideas”.

South-East Asian universities, now in the process of rebuilding, to a great extent rely on the expertise of foreign institutions and academics. The critique of Thomas makes it very clear that building advanced education systems requires creativity, imagination and expansive thinking. Yet, preliminary research data obtained in 2018 from Indonesian ELTE scholars by the author’s doctoral students demonstrate a need for Indonesian universities to pause and reflect on the sources of the data that shape the frameworks which inform their development. It is clear from the findings that Indonesian academics had been given a great deal of knowledge throughout their professional career. For example, ELTE academics have a good command of TESOL (Teaching English to Speakers of Other Languages) and literacy theories, research methods expertise, and rely heavily on linguistics as a tool for understanding the needs of their students. Yet knowledge of processes that would support creativity and a systematic approach to thinking shows to be absent in their self-reported data [8],[9]. In other words, Indonesian ELTE academics know well what to teach and how, much less why. They tend to approach knowledge as a given, rather than as perspectives to be further investigated, challenged and re-shaped. While these studies help make these issues visible, they also provide an opportunity for international universities and academics to reflect on the nature of the capacity-building support that they extend to colleagues in Indonesia. Traditional dependencies on longstanding truths and solutions need to be examined in the light of concepts and evidence from a multitude of disciplines and research areas, for, as argued by Thomas [7], new and risky ways of thinking to emerge that feed the discipline with

understandings that are both up to date, critically-informed and interesting.

B. Constructivist Axioms and Education Research

Constructivism cuts across many disciplines including the sciences of education and as a philosophy, it is complex, with many constructivists not always agreeing on all details [10]. However, in a nutshell, constructivism preoccupies itself with how people develop a meaningful relationship with reality. Some of the key assumptions of constructivism are that our knowledge of reality and, therefore, the reality itself are not independent of their producer: people construct knowledge, they do not apprehend it directly, “knowledge does not result from a mere recording of observations without a structuring activity on the part of the subject” [11]. This does not mean that reality does not exist. As Kant put it [10], “... though all our knowledge begins with experience, it does not follow that it all arises out of experience”. In other words, as Peterson [12] puts it, chaos creeps in when our interpretations, scientific or cultural, generate undesired results. Knowledge, in this sense, has an adaptive function, helping us cope in the world of experience, rather than helping us see the world as it might “exist” apart from us and our experience [10].

From the perspective of research, different constructivists investigate different aspects of the construction process. According to Phillips [10], Piaget and Vygotsky had been concerned with how the individual learner goes about the construction of knowledge in his or her own cognitive apparatus, the former “stressed the biological/psychological mechanisms to be found in the individual learner, whereas the other focussed on the social factors that influenced learning”. Not all constructivists take the individual as their object of investigation. Some concern themselves with the construction of human knowledge in general [10]. However, they all agree that human beings are active producers of the knowledge straddling the faultline between the personal and social realms of existence. This is the case, except for some extreme theorists who view knowledge construction as a process carried out by groups or communities and “subcommunities”, not by individuals [10]. Phillips does not explain what Nelson meant by communities and subcommunities, how exactly they are formed (other than by referring to a foggy concept of “class struggle”) and what would be the smallest number of people would form them.

Education has not made much use of the constructivist paradigm. Instead, according to Thomas [7], education research has come full circle from an apprenticeship model of the 19th century back again to the apprenticeship model. In other words, not much has changed over the last one hundred years. Following Carr [7], Thomas traces the beginnings of educational theory to the 19th century where, as he puts it, in the spirit of post-Enlightenment, English reformers agreed to rationalise educational practice, which back then followed a pupil-teacher method of apprenticeship, “a process to which we have now ironically returned”. Accordingly, scaffolding is a strategy that currently dominates education. In educational

contexts, it is a process through which the teacher provides students with a type of temporary framework for their learning [13]. This type of structure is meant to encourage students to develop their own initiatives, including motivation and resourcefulness. Structure is the key. Scaffolded instruction involves “the systematic sequencing of prompted content, materials, tasks and teacher and peer support to optimize learning” [14]. What exactly informs the process of sequencing is not clear. Typically, scaffolded instruction involves decisions made according to arbitrarily established scales of difficulty, with education research compiling “empirical evidence” of its successes and failures while also failing to examine critically the assumptions that inform the entire process.

In the light of this critique, engaging in innovation appears to be less difficult than it might have seemed at first. Indeed, innovative thinking is easy provided one is not scared to ask questions. As Thomas [7] argues, it is our questions, however irrelevant they may seem, that take us forward.

C. Constructivist Axioms and Innovation

Guerrero and Villamil [15] raise some serious questions for the proponents of the apprenticeship model. For example, Guerrero and Villamil [15] argue that the claim that experts have the capacity to guide a novice also evokes another claim, i.e. that the “tutor has not only a theory of how the task or problem is to be completed, but also a theory of the tutee’s performance”. In other words, there is not much to investigate other than simply mapping out this intuitive knowledge. In similar vein, but not in direct relation to education, during the Žižek and Peterson debate [2], Žižek criticised Marxism for hijacking the individual and group interests that shape our social and political lives and replacing those with an “agent”, a communist party, that like the scaffolding teacher, “knows” the laws of history and follows them in order to reach the next stage of development/social evolution:

The danger in Marxism is for me this teleological structure: ‘we are at the zero point. It is a unique chance of reversal into a new emancipated society and so on and the danger here is that of self-instrumentalization. Proletarian communist party is an agent of history which knows the laws of history, to put it, follows them and so on’. That’s the position of catastrophe [2]

The critique by Žižek [2] and Guerrero and Villamil [15] centre on the concept of meaning. In other words, while a constructivist researcher may foreground different factors that interact with meaning-making, ultimately, their respective descriptions or explanations of the process are always biased. In other words, they do not capture all factors, only the ones that they select as interesting to their own study. As pointed out by many researchers, including Peterson [12], the process of meaning-making is complex and requires investigation, rather than assuming it to be readily available to a tuned-in “eye of an expert”. For Peterson, addressing the concept of meaning-making is foundational to the job of learning how people develop a meaningful relationship with reality. Peterson’s framework for understanding this process is structured around a number of axioms that he developed on the basis of empirical evidence (Table 1) from a range of studies, mainly in neuroscience and psychology, but also Artificial Intelligence and other. The axioms outlined below were depicted as relevant to second language pedagogy. However, this is not a closed list but an example to demonstrate that research needs to develop its principles, or axioms, based on evidence, much less on beliefs.

- (1). We experience the world in terms of categories that have motivational and emotional significance to us and that inform us how to be or act in the world.
- (2). Paying attention to the emotional and motivational sources of meaning is a process that both protects us from “disorder” and attributes to individuals the power to create the reality they want to see.
- (3). Exploratory behaviour is prerequisite to learning. Exploration changes the sensory quality and motivational significance of one’s experience.

Table 1 summarises what is known about how people process information. In order to design innovative research, implications need to be developed that will draw on this evidence and the axioms outlined above. Research that will ensue will need to consider all evidence and axioms, not just a few. Those outlined in Table 1 are a rough summary of a constructivist framework of Peterson that acknowledges both the evolutionary and cultural foundations of human behaviour. Some of the implications are outlined in Table 1. They are not exhaustive and will benefit from further refining.

TABLE I. EMPIRICAL EVIDENCE ON HOW PEOPLE PROCESS INFORMATION

Empirical evidence	Implications for innovation in pedagogic research
<p>People differ: Studies in genetics and paleoanthropology demonstrate that there is always greater diversity within a group than between groups because people differ in a multitude of ways. These differences are both biological (“two random individuals from any one group are almost as different [genetically] as any two random individuals from the entire world” The Genome Project, 2001, p. 182) as well as cultural, value-based (“We act, to transform ‘where we are’ into ‘where we would like to be’”, [12]).</p>	<p>Learning environments are needed that do not teach to narrowly defined outcomes as is the case in the apprentice paradigm. Transformative teaching/learning outcomes are necessarily multidimensional. Personalised support able to account for students’ personal goals and perspectives is needed to secure students’ meaningful engagement.</p>
<p>Biology and culture: The brain does not perceive reality directly [27],[28] Culture and biology interfere with this process as well experience and personal characteristics.</p>	<p>Research is needed to investigate the cultural (motivational and emotional) and the biological factors that impact on and interact with students’ learning.</p>

Empirical evidence	Implications for innovation in pedagogic research
<ul style="list-style-type: none"> • Biology: People are not born as clean slates. They come fully equipped to adapt to their environment with capabilities, acquired in the process of their evolution, that they draw on to build their life experiences. Evidence shows that people are <i>multisensory</i> and process information in a multisensory manner [29]. We are also born with about seven brain <i>circuits</i> that receive information, process and interpret it, and send out updated signals for the brain to use in response [30]. We also have two <i>hemispheres</i>, each adapted for different purposes [12],[19], with the right hemisphere being considered as critical for learning, while the left one stores information and processes that had been mastered. 	<p>Research is needed that integrates findings on human biology to provide students with support that draws on these findings and does not contradict them. Learning environments are needed that (a) target the right brain hemisphere to stimulate perception and learning; (b) engage students' multisensory neural networks; and (c) do so in ways that facilitate exploratory opportunities enabling students to flexibly recombine stored information in novel ways and generate new possibilities.</p>
<ul style="list-style-type: none"> • Culture: Perception is an act of personal meaning-making, an act or reconstruction, not reaction [31]. We <i>experience</i> life's challenges as subjective judgments but <i>assess</i> the significance of our actions in terms of their transformative impact on us and those that we seek to affect. When these individual and social dimensions of experience are ignored, so too are the emotions and motivations that give reason, and thereby meaning, to our actions [12]. 	<p>There is a need for feedback opportunities where students can draw on a broad range of resources in order to build an increasingly rich understanding of their capabilities to use language/literacy skills.</p>
<p>Personal experience: It turns out that people do not act on <i>input</i> as such, but more on <i>output</i>, i.e. the feedback that they construct of the interpretations on which they act.</p> <p>People respond to the world in relation to what they already know about it, not in relation to what is. This applies equally to vision, hearing as well as memory and comprehension ("we perceive what we are"). Perception is a reconstructive process, as opposed to the simple retrieval of a perfect holistic record [27]. These findings are consistent with evidence demonstrating that we do not see reality directly, "So, you can think of perception as a joint hallucination in which our perceptual predictions are being reined in at all points by sensory information from the world and the body" [32]. Past experiences both inform perception, but also inhibit registration of stimuli that are not part of one's system.</p>	<p>There is a need for research where students solve <i>their</i> problems, not learning tasks or prompts arbitrarily constructed by their teachers.</p>

D. Reading for Emotion

The *Reading for Emotion* model was designed by the author of this paper [16] to support students' comprehension and production of texts. The model was informed by the axioms outlined in the previous section. In this regard, the model offers a change from current approaches to language and literacy pedagogy research. Currently, this research is dominated by a genre approach based on Halliday's [17] model of linguistics that makes the text the object of study. Thus, typically, in a genre-based literacy classroom, students study functional relationships in texts by relating their generic purpose (writing an essay, asking for help, [18]), register (formal, informal) and their linguistic arrangements. In this manner, the approach locates the building elements of text in a linguistic system of its choice, not in people. This is why the genre approach does not begin with the students and their understanding of the world, but with a text. In a genre-based literacy classroom, students do not solve *their* problems, but *arbitrary* tasks designed to reveal for them the world *as it is*. A good example demonstrating the workings of this approach is Kathy Mills' [33] study. There she justifies the genre approach in a context of students learning to design a Claymation movie, in reference the point of view of the approach, not that of the students:

- i. What Claymation movies are: a "movie-making technique involved planning a storyboard, sculpting plasticine characters, designing miniature, three-dimensional movie sets, filming using a digital

camera, and combining music or recorded script with the film clips."

- ii. What the students did: "After filming, the students digitally edited the movies with teacher assistance using Clip Movie software. The movies were presented using Quick Time Pro software and a data projector." And
- iii. Why the students were engaged in learning to design a Claymation movie: "The students were required to effectively communicate an educational message to their "buddies" in the preparatory year level (age 4-5). The movies were also presented at a school event for the parent community, having real, cultural purposes, and demonstrating the transformation of resources to create original, hybrid texts".

The rationale for the class does not begin with students exploring the meaning of the goal "to effectively communicate an educational message to their "buddies" in the preparatory year level". Instead, the approach begins with a solution to the problem, which is to design a Claymation movie. The assumption is that students will understand the meaning once they go through the steps of the design. This assumption is drawn by researchers directly from Halliday [18] believing that when a child understands the functional uses of language in the range of ways the school demands, they will be able to succeed in school. There are no empirical studies offered that would validate this claim. Instead, the categories of the approach are also the categories for

measuring students' success. It is also not clear what will need to be investigated when students fail to learn what the approach seeks to teach. In other words, what should trigger an investigation of the entire approach and its underpinnings?

The *Reading for Emotion* model builds on the above critique and a concern that in a genre-based classroom the concept of transformative learning is caught up in a methodology where students' responses are more a reaction to teachers' prompts rather than a reflection on the impacts of their actions and beliefs. The *Reading for Emotion* draws on empirical evidence from neuroscience (outlined in Table 1) that demonstrates that emotions are fundamental in shaping our both our intentions and interpretations. The learning approach that the model creates is exploratory and resource-based. Very briefly, the model prompts students to analyse texts, or any cultural artefacts (e.g. posters), in terms of emotions and in relation to the different stages of text production outlined by Lian [17] that, according to her, are shared by all texts, even when they are absent. The absence would signal either that a text is constructed badly, or that a stage was missed for a reason of sorts. The stages are a small, but important, improvement on those generally mentioned in literacy research: Setting Focus, Disturbance, Dialogue, Development, Resolution, and Moral. The stages offer independent criteria for text construction and analysis.

When analysing texts, students break the text into those stages, learning to decide where one section stops and where the next one begins. Students analyse the emotional impact that they think the author sought to evoke in readers in each of its respective stages. They focus on why they think so, what devices the author used that helps them make this judgment, where else they have seen those, what alternatives were available to the author, why did s/he did not use them, and what would change had an alternative been used. Younger students/children can be assisted by the teacher, with emotions for each stage being marked with an emoticon (children then can re-tell the text or a story about it while focusing on emotions noted with the emoticons and use them as memory prompts). It is critical that students are confident in their judgment. To this end, the model stimulates exploration across different texts and/or artefacts, with

students (helped by teachers) investigating texts in order to make increasingly better-informed understandings. Since all action is goal-oriented, analyses of this kind should be part of a bigger project. Thus, students' judgments can be immediately integrated into those projects, either by informing text construction or by students creating personalised notes about the texts that they investigate and the tools they use. To help students, teachers can design databases (Figure 1) that contain examples of texts already analysed for students to use them as quick "compare and contrast" references.

The value of emotional analysis is multiple. For example, (a) the model is not led by any specific ideology, political, social and cultural; (b) it offers an opportunity for a thorough analysis of texts and can be integrated with other tools to enrich the analysis; it is not a close system with closed categories; (c) it creates conditions for students to investigate their own beliefs and contexts; (d) it teaches students that all our actions have emotional basis. This teaches students to *watch* themselves in their lives outside school and reflect on the intentions and emotions that motivate them. There is not enough scope in this paper to identify all qualities of the model and it is now part of a number of studies that investigate its educational potential. Also, in teacher education courses, the author used it also in teaching poetry, with the model being integrated together with other tools designed to assist students to analyse music genres, rhythm and aesthetics [19]. When working with the *Reading for Emotion* model, the key task of the lecturer is to facilitate this explorative (compare and contrast) process for students to ask questions of themselves, analyse and evaluate. A database of pre-prepared resources would ensure that students can find information rapidly. It is important that the texts that students explore include a range that reflects the diversity of our communities for students to build their understanding of themselves and of the world in a manner that supports their intercultural and critical awareness. Overall, the *Reading for Emotion* model offers what seems to be a radically new way for thinking about critical reading, thus opening new possibilities for research and practice.

Type of Text	Title	Text Function	Emotion	Text	Source	Information
Sort	Sort	Sort	Sort	Sort	Sort	Sort
Aesop's fable	The lion and the mouse	1.1 Setting focus	To intrigue	One day, a mighty lion	listen and watch	Sentence 1
Aesop's fable	The lion and the mouse	1.2 Setting focus	Frustration	tired from hunting all morning	listen and watch	Sentence 1 sound
Aesop's fable	The lion and the mouse	2.1 Disturbance	to scare the reader	Some mice that lived at the foot of the tree scurried over the sleeping lion to return to their home.	listen and watch	
Aesop's fable	The lion and the mouse	2.2 Disturbance	Trifly	But just as the last mouse was crawling over him, the lion woke up. The lion placed his big paw on the little mouse, trapping him.	listen and watch	
Aesop's fable	The lion and the mouse	3.1 Dialogue	feeling empathy	The mouse was very afraid, he apologized to the lion for disturbing him and begged him to spare his life and let him go.	listen and watch	
Aesop's fable	The lion and the mouse	3.2 Dialogue	Relief	The lion pitied the little mouse so he lifted his big paw and set the mouse free.	listen and watch	
Aesop's fable	The lion and the mouse	4.1 Development	Anticipation, anxiety	Sometime later, the lion was walking near the mouse's home.	listen and watch	
Aesop's fable	The lion and the mouse	4.2 Development	Empathy	The lion accidentally stepped on the trap set by a hunter and the net made of big ropes captured the lion and pulled him up to the tree.	listen and watch	
Aesop's fable	The lion and the mouse	4.3 Development	Helplessness	The lion struggled to free himself but could not. His angry roars rumbled through the forest as he became upset and afraid.	listen and watch	

Fig. 1. A working model of a database supporting Reading for Emotion

TABLE II. COMPARING THE PRINCIPLES OF THE READING FOR EMOTION MODEL AND GENRE-BASED LITERACY PEDAGOGY

Axioms	Genre-based approach	Reading for Emotion
(1). We experience the world in terms of categories that have motivational and emotional significance to us and that inform us how to be or act in the world.	Not addressed	Foundation of the model
(2). Paying attention to the emotional and motivational sources of meaning is a process that both protects us from “disorder” and attributes to individuals the power to create the reality they want to see.	Not addressed explicitly.	Foundation of the model
(3). Exploratory behaviour is prerequisite to learning. Exploration changes the sensory quality and motivational significance of one’s experience.	Not addressed. For example, in Mills’ (2006) model, it is not clear how students gather information to offer critically-informed perspectives on previous Claymation movies and their own proposals.	Foundation of the model

II. DISCUSSION

The scope of this paper does not allow for listing all examples developed within the intellectual framework outlined above. More examples can be found in Lian A.P. [20]-[26]. Common in all these innovations is an understanding that researchers are not free to choose a framework in which they work. It is critical that researchers have an up-to-date knowledge of the empirical science and that they integrate this knowledge in a manner that makes the principles of their innovation clear and argued in relation to what is accepted as evidence in science, not just in education. No discipline can afford to see itself as an island, isolated from the discoveries in other fields. As demonstrated with the example of the *Reading for Emotion* model, this form of work marks a clear diversion from traditional styles of literacy and second-language pedagogy research both in principles and in the learning environment that the model creates.

It is the belief of the author that the research framework proposed in this paper will open education to the external

world of science and philosophy, it will enable education studies to converse with the global, interdisciplinary research and, will make education research exciting precisely because it is open to innovation. Once education opens itself to the world outside its regular disciplinary borders, quite possibly, it will welcome intellectual events, like the debate between Peterson and Žižek, as an opportunity to re-examine its own beliefs against the context of new problems and arguments.

III. CONCLUSION

The intention of this paper was to present arguments demonstrating that education research, to be relevant, cannot afford remaining hidden behind the walls of its own jargon and beliefs, but, rather, needs to expose itself to the findings and understandings from other disciplines in order to modernise itself, connect and engage in a genuine dialogue. In view of the author of this paper, this process of linking is not optional. Rather, as argued throughout this paper, it is critical if education is to join the global debates on learning

and to contribute to them. A dialogue of this kind would also help education research generate increasingly stronger evidence that policy makers all over the world urge for. Overall it would strengthen the discipline and ensure that *thinking* is not replaced by *practice*, an idea is already giving rise to institutions that construct teaching as a vocation, not an intellectual and complex discipline that it is. The goal of this paper was to demonstrate how complex education is and how much still needs to be done for government bodies to decide that skill teaching, rather building confidence in utilising research and developing inquiry skills, are the key needs of modern teacher education programs.

The paper began by referring to various debates that were organised exactly in order to stimulate interdisciplinary learning. Next, it examined the axioms of the constructivist approach and showed that, in education, the approach is used more as a shell rather than a springboard from which new things would develop. Jordan Peterson's own principles were then discussed and reviewed against research findings that are common knowledge among scientists investigating factors that impact on and interact with the process of meaning-making. Implications of this framework were developed to propose direction of future pedagogic research. The general argument of the paper is that innovation does not start with a theory for research to then play with its different components wile, essentially, offering nothing new. Rather, innovation is about developing the ability to engage in a dialogue at the highest levels. Without engagement and exposure, our innovative ideas, however irrelevant they may seem to us, remain unexplored and undeveloped. On the other hand, when translated into research and practice, education researchers will grow both evidence and confidence necessary to enrich the field and to play a critical role in policy dialogues on the future of the profession.

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