GUARDA, DYLAN
THE FINNISH LINE: A CRITICAL PEDAGOGICAL INTERPRETATION BETWEEN SELF-REGULATED LEARNING AND ITS TRANSFORMATIVE FUNCTIONS IN A FINNISH PRIMARY SCHOOL

Master’s Thesis in Education
FACULTY OF EDUCATION
Master’s Degree Programme in Learning, Education, and Technology
2015
Self-regulated learning theory (SRL) is commonly assumed to be neutral as the majority of research does not examine its inherent values. Transformative views of education, by their definition, are political at heart and as a result any claim of value neutrality is a de facto political stance; one that supports the status quo and resists that very transformation. To date, the loudest critic of SRL is educational psychologist Stephen Vassallo. His work was heavily used to anchor critical pedagogical interpretations of SRL. However, his critiques are strident and may exclude educators and researchers outside critical theory circles. As a result, in the spirit of critical pedagogy reflection is sought through a “language of possibility”, as opposed to only a “language of critique”, in order to deconstruct inherent values within SRL and investigate its possible transformative educative functions.

Furthermore, critical pedagogy theory is often situated in North/South American contexts and overlooks societies with less class inequality. The extent to which critical pedagogy applies and is relevant to Finnish contexts was analyzed and deemed to be important for transformative education. A qualitative exploratory field study was conducted to investigate the extent to which critical interpretations are applied in a Finnish primary school with an SRL focused programme. Research also assessed the extent to which staff members of this school are open to these critical interpretations. Data was collected through active participant observation and interviews. The sample included six educators.

Results showed that critical pedagogical interpretations of SRL were valuable for three out of the six educators. These three educators taught outside the SRL environment. However, four out of the six participants who identified strongly with critical pedagogy found SRL to be helpful. This highlighted the complex relationship between transformative educative applications of SRL. Ultimately, the results produced critical dialogue with the educators and were a crucial first step in the reflection process towards achieving transformative functions of SRL.

Asiasanat/Keywords: self-regulated learning, SLR, critical pedagogy, transformation, transformative education, democracy, neoliberalism, Dewey, Freire, Vassallo, Finland, primary school
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Acknowledgments

I would first like to express my gratitude to my supervisor, Ernesto Panadero for his hard work and feverishly fast replies. I would also like to thank Aino-Maaria Palosaari for her assistance throughout my degree. As well as, thank Rauni Räsänen and Gordon Roberts for their selfless dedication to their students and for fighting for policies which truly value education and give people like me this wonderful opportunity. To thank all the staff and students at my participating school for welcoming me and teaching me so much. And lastly, it should be emphasized that this Master’s thesis would not have been possible without my parents, Luis and Helena, and my sister, Nastassia, whose unconditional love and support got me to where I am today.
1 Introduction

This research is a theoretical investigation of Self-Regulated Learning Theory (SRL) and its possible transformative educative function. In other words, whether SRL implementations challenge the status quo by promoting change through personal growth or, transversely, whether SRL acts as a neoliberal guise by emphasising economic pursuits through 21st Century Competencies (21st CC) and reproducing existing class structures in society; or, somewhere in between. This paper will first contextualize SRL: reporting on its relevance in the classroom and its multiple theoretical frameworks including the often overlooked critical perspective. Next, this paper will define the function of education from a transformative point of view anchored to Freirean and Deweyan pedagogy. Subsequently, this investigation analyzes SRL based classrooms by focusing on teacher observations and interviews and establishing the extent to which they encourage transformative functions in the form of adopting critical pedagogy values and promoting transformative education. Lastly the research will be summarized, concluded and any limitations will be addressed.

2 Self-Regulated Learning

Within the past three decades the theory of Self-Regulated Learning (SRL) has been at the forefront of educational psychologists’ correspondence. SRL has been strongly linked with academic achievement (Zimmerman & Schunk, 2011) and more recently initiatives and strategies derived from theoretical correspondence have been actively applied in multiple schools
(Paris & Paris, 2001) and have sparked the attention of mainstream media outlets\(^1\) (e.g. CBC, NY Times, Huffington Post).

In Zimmerman’s (1989) seminal work he defines SRL from a socio-cultural perspective, as the degree to which students are metacognitively, motivationally and behaviourally active in their own learning. In other words, SRL is a socially embedded process where a learner uses strategies to influence their actions in order to achieve their goals. Zimmerman borrows heavily from Bandura (Zimmerman, 2013) to explain that these interactions are governed by a triadic relationship between the individual (the self), behaviour and environment (Boekaerts & Cascallar, 2006; Zimmerman, 1989; Zimmerman, 2002). This is best depicted by Zimmerman’s diagram (Figure 1). In essence, learning is not merely determined by the learner, it is influenced

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\(^1\) http://www.cbc.ca/news/canada/self-regulation-technique-helps-students-focus-in-class-1.2440688,
by environment and behavioural events in a cyclical fashion (Zimmerman, p.330, 1989).

According to Zimmerman it is precisely this reciprocal action that allows for self-regulative responses and he quotes Bandura & Cervone (1986) to effectively summarize this process by underlining that “Behaviour is, therefore, a product of both self-generated and external sources of influence (p. 454).” As shown in Figure one, self-efficacy plays a critical role to the regulation process by acting as a thermostat by evaluating efforts through a feedback loop and subsequently adjusting them accordingly (Zimmerman, 1989). This whole interaction between the personal, behaviour, and environment is further broken down by Zimmerman’s (2000) social cognitive model of self-regulation, known as Cyclical Phases model (Panadero & Alonso-Tapia, 2013). The three phases include: The Forethought or Planning Phase, which concerns itself with the preparation by dealing with pre-emptive metacognitive and motivational forces which affect future learning. The Performance or Monitoring Phase deals with the learning performance and includes self-monitoring elements including, self-control, and observation. Lastly, the Self-Reflection or the Evaluating Phase happens after the learning takes place by assessing the recently engaged process, adjusting it as needed and starting the Forethought Phase again. This in its entirety can be considered the Self-Regulatory Cycle (Cleary & Zimmerman, 2002; Puustinen & Pulkkinen, 2001; Zimmerman, 1998, 2000, 2002; Zimmerman & Tsikalas, 2005). In essence, SRL describes a self-guided process where learners intentionally, and eventually intuitively, use their mental abilities (motivational forces, metacognition, and strategic action) to reach academic achievement (Zimmerman, 1998).

More recent models have built on Zimmerman’s model and emphasized different aspects of enhancing and interpreting students’ SRL, for instance: motivation and volitional components (Wolters, 2003), task interpretation (Butler & Cartier, 2004), assessment (Panadero, Tapia, &
Huertas, 2012, Panadero & Alonso-Tapia, 2013) emotional control, (Boekaerts, 2011) among others, each with their own foci and unique interpretations. Although, it can be said that most researchers have a common perception of self-regulated learning within an educational psychology framework (Dignath, Buettner, & Langfeldt, 2008) there are still some issues that need to be addressed.

2.1 The Theoretical Context of SRL

Despite SRL’s surge in popularity and the accepted definition above, it should still be noted that SRL as a construct is multifaceted and, as a result, problems exist when assumptions are not clearly established. Points of contention can begin to manifest quickly, in its very name: where the word regulation refers to keeping a constant in the face of change whilst learning refers to changes in behaviour from experience (Zimmerman & Schunk, 2001). This is further corroborated by Zeidner, Boekaerts, and Pintrich (2005) when they state that:

At present, there is considerable confusion in the literature with respect to the criterial attributes of self-regulation, its key components, and related constructs from the same semantic domain…there are almost as many definitions and conceptions of self-regulation as there are lines of research on the topic. (p.750)

These intricacies further manifest themselves the deeper one delves into the topic as multiple authors point out varied disagreements on core terms and ideas. For instance, Dinsmore, Alexander, and Loughlin (2008) analyzed over 250 studies in the field of SRL and found that fundamental terms such as knowledge, learning, self-regulation, motivation, metacognition, etc. are used without proper operationalization and under the expectation that their meanings are well known and understood. The authors illustrate how it is problematic to use broad brushes when talking about specific terms because it causes confusion and unscientific conclusions. Ultimately, Dinsmore et al. (2008) conclude that it is a “hollow enterprise” (p. 405) to bring precision to the
theory if there is not an accompanying effort to extensively monitor and control terminology and concepts. This effort, however, is extremely complex and as a result needs to be multifaceted and accompanied with multiple theoretical viewpoints.

That is precisely what happens in the field of SRL. In Zimmerman and Schunk’s collection of *Self-regulated learning and academic achievement: Theoretical perspectives* (2001) provide seven distinct theoretical perspectives in which SRL can be interpreted, each of which provides their own set of vocabulary, processes and respective interpretations and conclusions [for a detailed review see Panadero and Alonso-Tapia (2014)]. At the introduction of their book Zimmerman & Schunk (2001) provide an elaborate table (p.8) which categorizes SRL’s properties by the multitude of existing theoretical viewpoints (Replicated in Appendix 1). After a quick review one begins to see where problems arise. For instance, if a person with no prior knowledge of SRL was introduced to the topic from a Behaviourist perspective they would view SRL to be a quantitative, linear process akin to operant conditioning; where behaviour is always a “function of its consequences” and self-regulation only occurs when the individuals arrange the environment in a variety of ways to alter the probability of their behaviour, thereby reinforcing future behaviour (p.60). In contrast, if an individual is presented SRL from a phenomenological view they would reject the above logical positivism and understand SRL to be a qualitative, “synergetic process” where the analysis must begin with the core characteristics of humanity and only after that analysis can there be agreement an on the particular techniques needed to understand these characteristics, and never the reverse (p.73). As a result, phenomenologically SRL centers itself with creating experiences that generate changes in perceptions and attitudes necessary to produce “adequate, healthy people, defined by those who have a positive sense of self, identify with others, and open to experience and acceptance and have a rich and available
perceptual field.” (p.70). These above differences are not just semantics or highly specialised theoretical quibbles; they have drastically different effects on the methodologies in the way research is conducted. As noted by Dinsmore et al. (2008) when viewed through a neo-behaviourist lens; conceptions of SRL are more closely defined, strict and rigid due to the behaviourist tradition of operationalization as opposed to when SRL is viewed from a social learning lens; where terms are more overarching and less distinct. This less than common discourse used by varying theoretical viewpoints makes it hard to reach consensus.

This problem however is not unique to SRL but part of a wider crisis that affects capital “P” psychology as a whole (Goertzen, 2008). As a result of the complexity of the topic of human thought and behaviour there is a tendency for the discipline to segment itself into increasingly smaller and varying branches to deal with their inherent complexities on a more nuanced level – each with its own set of vocabulary and ideas. The concern then begins to manifest itself on whether or not these smaller fragmented approaches adequately address the greater discipline of Psychology. As a result, there are those that would go as far as that Psychology is in a dangerously fragmented state (Yanchar & Slife, 1997). This fragmentation has obvious limitations to psychological research but it may also strengthen the discipline. Often in Psychology, including SRL, answers are not foreseeable (if they exist at all) and cannot be determined a priori; as a result, this discipline is forced to explore, experiment, and consider its many options through multiple, sometimes contrasting viewpoints. Hermeneutic interpretations play a critical role in the interpretations of psychological phenomenon (Teo, 2010). Needless to say, a unification effort to standardize psychological and SRL viewpoints would not only take an enormous effort to clarify all of the distinctions that different psychological researchers have drawn, but would also be detrimental to the field, as no singular viewpoint could reliability encompass all
psychological phenomena. Arguably then, all SRL interpretations are coloured by their context (historical, social and cultural) and as a result pluralism in Psychology (and by extension SRL theory) is essential (Teo, 2010).

This sentiment is also mirrored in subfields of Psychology, in this case educational psychology contexts. In their review of all the different theories within SRL, Panadero and Alonso-Tapia (2014) suggest that each perspective has its own strengths and it is important to develop to comprehensive views of the different theories to facilitate understanding. Although the authors ultimately favour socio-cognitive theory for elementary contexts and information processing theory for adolescent contexts (p.20) a well-rounded understanding is still vital for SRL applications. This notion of breaking theoretical boundaries is also argued by Paul Kirschner in a post on a series emphasizing the importance of educational psychology research: “we in the educational sciences need to stop turning our paradigms into paradigmas, lay down our rhetoric, and work together. Only then can we integrate all of the knowledge and the different perspectives that enrich our field” (Kirschner, 2015). Thus when conducting research it is essential to take a hermeneutic perspective, or else risk incomplete, if not totally erroneous, conclusions. It is precisely this reason why a critical aptitude is needed in order to consider and evaluate all perspectives, especially those that are overlooked due to socio-political reasons. Critical pedagogy theory provides this and SRL must be analyzed with such a lens in a manner that bridges the varying view points and bring the strengths of SRL to fruition as well as address its limitations in order to further improve it theoretically.
3 Critical pedagogy

Before critically analyzing SRL, it is first essential to grasp a fundamental understanding of critical pedagogy. Simply put, critical pedagogy is the application of Critical Theory to education. In philosophy, Critical Theory applies a critical lens to society and focuses on the essence of humanity. The pendulum swings away from heavy positivistic trends of modern psychology and education, which, in an effort to follow the natural sciences and standardize its methods, neglects nuanced and qualitative aspects of society. In the field of education, critical pedagogy deconstructs social realities by highlighting systemic injustices that dehumanize and stifle learners. Champions of critical pedagogy include: Paulo Freire, often regarded as the father of critical pedagogy, John Dewey, and more contemporary authors like Peter McLaren and Henry Giroux, among many others. These authors challenge populist dogma and ask educators, and students alike, to ask important questions about society, principally: Why are things done the way they are? Who benefits? Who suffers? And why?

3.1 Paulo Freire’s Critical Pedagogy

Paulo Freire pioneered critical pedagogy in early 20th century Brazil, as he tried to liberate impoverished and illiterate farmers through education. This pedagogy was aimed at the oppressed and focused on creating “conscientização”; a critical consciousness which “represents the development of the awakening of critical awareness” (Freire, 1974 p.15) to “make oppression and its causes objects of reflection by the oppressed” with the hope that “from that reflection will come their necessary engagement in the struggle for their liberation” (Freire 2000, p.48). This

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2 The irony of advocating for social justice yet using a patriarchal term like “father” is not lost on the authors and this is addressed and criticized by Simon (p. xvi, 1992) which is co-edited by Freire himself. That being said the term is used to both address the roots of critical pedagogy and highlight the extent to which critical theorists analyze themselves.
idea of hope is a central tenet of critical pedagogy and for Freire as it sustains the human spirit in the form of providing something to strive for. However, as activist, philosopher Cornell West explains:

You have to draw a distinction between hope and optimism. Vaclav Havel put it well when he said “optimism” is the belief that things are going to turn out as you would like, as opposed to “hope,” which is when you are thoroughly convinced something is moral and right and just and therefore you fight regardless of the consequences. In that sense, I’m full of hope but in no way optimistic”. (West, 2012)

In this sense, Freire does not want to promote optimism or a laissez-faire belief that things will work themselves out; instead he heavily encourages a sense of advocacy by instilling hope and purpose whereby people will fight to change their environment and better themselves. This advocacy, promoted by Freire, is not done by proxy; by simply writing articles and books, rather the methods are governed by a pedagogy that incorporates reflection and action into its very praxis. As explained by Britzman (2012), theory and practice have been historically presented as a dualism and this is problematic because within this, theory is increasingly separated from lived experience and lived experience from theory. This dichotomy inhibits progress by promoting zealous practice and/or groundless theory. As a result, in critical pedagogy a conscious effort is made to incorporate both theory and practice into its praxis. One example of this critical praxis manifested within learning environments is Freire’s theory of rejecting of banking education, accompanied by the practice of active dialogue and reflection. Freire refuses the idea that education can happen when learners are treated as blanks slates empty containers simply waiting to be filled by their teachers (Freire, 2000). Instead, for Freire education involves active dialogue, shared communication, and reflection; for without this praxis of shared inquiry, “individuals cannot be truly human” (Freire, 2000 p.72). As a result, educators

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3 “Hope is definitely not the same thing as optimism. It is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out.” (Havel and Hvižďala, 1990)
who are committed to liberation must explicitly reject the banking concept “adopting instead a concept of women and men as conscious beings” (Freire, 2000 p.77) who are capable of actively participating and guiding their learning in the life long journey of education. This, in a nut shell, is critical pedagogy.

In his introduction to *Critical pedagogy in the Everyday Classroom* (2008) Monchinski argues it is important to remember critical pedagogy is heavily context specific. As a result, contemporary applications of critical pedagogy, in primary schools in urban metropolitans for example, are different in practice and theory to Freire’s context (i.e.: educating peasant farmers to read in rural Brazil in the early 20th Century). Peter McLaren provides a relevant definition for critical pedagogy in modern contexts as “a way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the institutional structures of the school, and the social and material relations of the wider community, society, and nation-state” (McLaren 2000, p. 35). In this framework, McLaren equips educators with a framework necessary to view and interpret potential threats to education – in particular those stemming from economic and neoliberal dogma – and allows educators to navigate, with their students, the socio-political forces that affect education.

3.2 Neoliberalism

The principle threat to modern day educational institutions comes in the shape of neoliberal forces (Giroux, 2004). Neoliberalism is a set of political beliefs that proposes “human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices” (Harvey, 2005 p.2). In this sense neoliberalism sees free market forces as the
arbitrator of society and furthermore encourages other institutions, including education, to practice neoliberal ideals in order to further promote its version of human well-being. This political trend which has been increasing since the late 70s has been hailed by capitalists for promoting and increasing overall global prosperity (see: Friedman, 2007) but it has also been directly linked to wide spread inequality (see: Giroux, 2011), environmental disasters (see: Kline, 2007) and gross human rights violations (see: Chomsky, 2008). It is not surprising than that educational institutions have equally felt pressures from neoliberal forces.

There appears to be a fundamental conflict between the raison d'etre of neoliberalism and the spirit of education. Neoliberalism is concerned with growing capital and providing the forces that perpetuate growth. As championed by Dewey, education is also concerned with growth but one that is, not necessarily incompatible, but starkly different from that of neoliberalism.

3.3 John Dewey’s Critical pedagogy and the Concept of Growth

John Dewey is often regarded as one of the main theorists of constructivism (Phillips, 1995). However, constructivism (even social-constructivism) can still be individualistic; what separated Dewey from other constructivists was his emphasis on the social construction of knowledge and its interaction with society (For a deeper analysis on the range of viewpoints within the constructivist theory spectrum see Phillips, 1995). In this way, Dewey shared numerous views with Freire (Feinberg and Torres, 2001). More specifically, Dewey was against false dualisms and was concerned with the betterment of humanity through educational and democratic means. Both he and Freire believed in effective dialogue and that education had to come from the learners’ needs. However, they differ in the way they get their message across; Dewey comes across less radical than Freire. The latter is ready to incite revolution in order to promote change while the former is more concerned with promoting an active and healthy democracy within the
classroom and through educational polices. This difference is less ideological and more so reflective of the difference between their contexts. Dewey and Freire shared similar ideas but Dewey appeared to be able to resolve certain Freireian ultimatums. For instance, unlike Freire, Dewey acknowledges that transmission of education (banking) is sometimes an important method of schooling but he also agrees that it is only one means and is by far lacking (Dewey 1997, p.4). Dewey, like Freire, favoured communication (dialogue) and emerging students in inquiry and meaningful experience (reflection). Fundamentally, Dewey argued that education should be about promoting personal growth in students by instilling a passion for lifelong learning. For Dewey “the educational process has no end beyond itself…” (Dewey 1997, p.50) and therefore, “since growth is the characteristic of life, education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent in which it creates a desire for continued growth [learning] and supplies means for making the desire effective…”(pg.53).

On the surface, this notion of growth appears to be similar to that of neoliberal growth but, fundamentally, it is not. Both growths want to promote further growth for the sake of betterment. The critical difference is the type of growth that is being discussed. For neoliberalism, growth is the extent to which capital is generated and the promotion of more capital in the future; profit for the sake of profit. It can then be reasoned that for Dewey, growth is about bettering one’s self and humanity as a whole by instilling a passion for learning and their by continually growing by continuing learning what one loves; education for the sake of education. If that love of learning generates capital, than it may align itself with neoliberal goals, but often personal growth does not. Education for the sake of education is different, and less harmful than profit for the sake of profit. One of the champions of free market capitalism Milton
Friedman adamantly believes that humanity can be bettered by growth of capital and this is demonstrated in an interview where he states that: “The most important single central fact about a free market is that no exchange takes place unless both parties benefit…if A and B come to a voluntary agreement, it's because both of them are better off” incapability (Friedman, 2000) This is acceptable when indeed the terms of exchange are voluntary but it does not take long for one to question this notion of “voluntary” and how quickly it can become, coercion. Technically, Freire’s farmers gave their consent to slave away on the farms in the sense that they were eager to work but to what extent is that truly consensual given their lack of alternatives and choice in economic, personal, and educational terms. Furthermore, to which degree did the farmers truly benefit from this exchange? The answer becomes apparent by their illiteracy and their squalid living conditions. This is the fundamental difference that exists between educational growth and capital growth.

4 SRL and Neoliberalism

Examples of neoliberal corruption of education are rampant, but are not always obvious. Examples can be found in the trends to emphasize standardize tests, the erosion of a public sector of education and the strengthening of a private sector leading to a growing inequality and divide (Apple, 2000). More implicit ways of neoliberal forces can be found inherent in learning theories. The theory of Self-regulated learning (SRL) has been accused of disguising itself as a progressive model when in fact it has aligned itself with neoliberal agendas (Vassallo, 2012). SRL has had little analysis from a critical pedagogical perspective. This becomes quite evident, as the seminal collection of SRL viewpoints (previously mentioned) by Zimmerman and Schunk’s (2001) makes no mention of a critical perspective. Additionally, authors (e.g. Vassallo,
Martin, Thoutenhoofd) critiquing SRL from this viewpoint are relatively few and their contributions are relatively recent.

In the critical literature there appears to be several key critiques of SRL, all of which share one thing in common: that SRL has an alignment to neoliberal thought and this threatens the ethos of education. This alignment can be uncovered by: i) analyzing SRL’s conceptions of the self, ii) its focus on middle class ideals and neglect of working class culture, and lastly, iii) its overarching assumption that the individual must be regulated and change to succeed in their environment as opposed to changing the environment.

4.1 Critical Interpretations of the Self in SRL

SRL literature places ‘self-regulation’ on a high pedestal as can be seen by the following description, “Perhaps our most important quality as humans is our capability to self-regulate” (Zimmerman, 2000, p. 13). Yet a sparingly amount of the educational psychology research is dedicated to define “the self” (Martin, 2008). It is true that the conception of the self cannot be easily defined as demonstrated by the century-long debates (Vassallo, 2012) but this is emblematic of the previously discussed problematic uses of terminology within the educational psychology literature. Martin and McLellan (2008) argue that SRL research is operating without an agreed upon clarification amongst the various terms (which would take an enormous effort) and as a result operates within a “solipsistic fragmentation” as researchers collaborate within their respective theoretical viewpoints. To address this Martin and Sugarman (2001) provide a thorough review of the self and explain that the self is dynamic and historically defined process that is always embedded within historical and sociocultural contexts and as a result is not a priori but develops as individuals relate and reflect with their environment. Martin (2007a) further narrows this definition by defining three types of “self”s: the expressive self, managerial self and
the communal self. According to Martin (2007a) the expressive self, although having humanistic sources from authors like Maslow and Rogers, was appropriated by more traditional forms of psychology with their heavy use of psychometric scales and measures. Expressive self is mostly found within self-esteem/self-concept literature, deals with inner forces of the individual and is fuelled by a tendency toward self-development and self-expression. Similarly, the managerial self, explains Martin, focuses on the inner core of the individual. The expressive-self focuses on self-worth while the managerial self-focuses on the self’s ability to monitor and regulate itself with respect to academic tasks and as a result is also heavily emphasized in studies of self-efficacy and regulation. To contextualize both selves socio-politically Martin (2007a) uses a graph (Figure 2). The expressive self is favourable to individual freedom and self-fulfilment and favours the actualization of free and self-determined individuals. Similarly, the managerial self is favourable to self-control and civic virtue conductive of self-governance while respecting existing sociocultural values. Both these selves are encompassed heavily within the SRL literature. Martin (2007a) argues that both expressive and managerial selves are highly

Figure 2. A sociocultural, psychological landscape of the selves of educational psychology from Martin, J. (2007a). The selves of educational psychology: Conceptions, contexts, and critical considerations. Educational Psychologist, 42(2), 79-89
individualistic: their resulting research act as “an inner bastion of individual experience” ultimately promoting artificial dualisms by favouring a Cartesian dichotomy that divide the inner and the outer, which results in an isolation between the self and its environment. Further, dichotomies can be seen in the preferred methods used by this line of research. The heavy use of personality scales and measures reflects an increasing trend of psychologism whereby, the human essence is refocused to inner states there by trapping and separating definitions and explanations inward and away from the person as part of a biophysical/social world (Martin and McLellan 2008). This is prevalent in SRL research even though the environment and the self are both analyzed. Although Zimmerman’s cyclic model of SRL, follows Bandura’s sociocultural learning theories and incorporates both the self and the environment in a triadic relationship (Zimmerman, 1989) it falls short of incorporating socio-historical and contextual factors and attend more explicitly to questions on agency and selfhood (Martin, 2007). In other words, even though the self and environment are presented as being relational in SRL; they are artificially separated by undue attention to historical forces.

Other researchers, (Hadwin, Järvelä, &Miller, 2011) try and ameliorate this self-centric self by emphasizing co-SRL and shared-SRL. In these cases, SRL is taken to collaborative learning contexts. Co-SRL emphasizes emergent interactions where individuals assist one another’s regulation (Hadwin, et al., 2011). Similarly, shared-regulation is interdependent or collectively shared processes for the purpose of a shared goal in which group members regulate together (Hadwin, et al., 2011). Although co-construction and shared-SRL emphasizes group activity and shared goals it appears these prefixes are used “ostensibly” as both “co” and “shared” regulated learning still identify with tenets of SRL by still treating the individual as a separate entity (Vassallo, 2014).
Contrastingly, the communal-self offers a more balanced approach as it contextualizes itself within time and place. For Martin (2007a) the communal-self is grounded with authors like Dewey and Vygotsky and as a result the view of the learner shifts away from dichotomized inner workings toward more co-constructed self, a “…self-societal dialectic. It is a self that is cut from the fabric of those sociocultural conventions and ways of life into which we are born as biophysical human beings, and come to exist and understand ourselves as particular kinds of persons” (p.83). It is important to note that Martin is not neglecting human agency and calling for strict social determinism, instead, in the face of the increasing tendency to elevate the individual self within educational psychology Martin is calling for a swing of the pendulum toward a more central position. A position, derived from Mead\(^4\) and situated in Figure 2, that treats the self, the communal-self, as embodying both mind and selfhood as being socially and historically constituted because ultimately, they cannot be disentangled from our sociocultural interactions in which the emerge (Martin, 2007).

The above three distinctions of the self are important to draw upon for their implications of SRL research. The largely absent communal-self and the focus on managerial and expressive self further illustrate the alignment between SRL theory and neoliberalism. SRL’s emphasis on self, mirrors Neoliberal’s focus on private enterprise as individualistic and private affair. Additionally, both paradigms treat the environment and social contexts as separate, sometimes even secondary, to that of the self. This contradicts established research that contextualizes the communal self and shows that collaboration among educational intuitions, families, and their

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\(^4\) For a further understanding of Mead’s conception of the self, see Mead (1934). As explained by Martin (2007b), Mead showed how the self is made up of two separate, yet related, constructs: the me and the I. Martin (2007b) goes on to say that, for Mead, the me is the sum of attitudes, perspectives, and values grounded in social organization; “The self does not exist simply in the bare organization of social attitudes” (Mead, 1934, p.173). While the I was the mechanism that provided “action over against that social situation within his own conduct” (175). In this way Martin (2007b) explains that the I is unpredictable but reactive to the me and social situations, attempts to produce novelty in individuals and the community. The novelty produced by the I is incorporated into experience, after the act is carried out. By layering the self into a me and I, Mead avoided a determinist polarization (Martin 2007b).
communities decreases dropout rates (Ziomek-Daigle, 2010). Lastly, neoliberalism emphasizes competition under the assumption that it will promote a “survival of the fittest” attitude. This rationale might be appropriate if all individuals shared the same environment and would be on an equal footing able to compete fairly, however this is not the case. SRL follows this neoliberal trend by assuming that learners share the same values and emerge from the same environment thereby ignoring individuals who do not belong to the dominant class.

4.2 Critical Interpretations of Class Values in SRL

The case has been made several times that it is essential that researchers and educators alike integrate attention to social class, both the privileged and the disadvantaged, to better understand the application of their theories (Bullock & Limbert 2009). Yet in the case of SRL literature, the majority of the research overlooks special needs learners and those of the working class. For instance, in one large meta-analysis of SRL interventions with primary students, Charlotte Dignath and colleagues (2008) excluded studies from such backgrounds for the sake of homogeneity for their analysis. Dignath et al. (2008) did not mention exactly how many studies had to be excluded for this reason. However, at the time of this thesis a literature search using computerized databases: PsycInfo and ERIC, consisting of 70 research databases, was carried out. Searching for the terms “self-regulated learning or SRL” and “low socio-economic status or low SES” within the English literature only produced three results. When “low socio-economic status or low SES” was substituted for “learning disabilities” it produces 19 results. When only “self-regulated learning or SRL” was used, it produced 1329 studies. This under representation as a whole can significantly affects studies’ interpretation and conclusions. For example, in a large study looking at determinants of SRL in elementary school teachers (Lombaerts, Engels, & van Braak, 2009) claim that “in general parents show a favourable attitude toward process-
oriented, constructive and collaborative learning environments” (p.164) that are favourable to SRL. They cite Roelofs, Visser, & Terwel, (2003) to make this claim. Upon further analysis of that article, Roelofs et al., (2003) admit themselves that out of the 636 parents, the sample was “not representative of lower grades…or of lower types of general secondary education” (p.89). As a result, Lombaerts et., al. (2009) generalizes parents’ favourable position to SRL when in fact they are speaking of parents from a particular class culture. This then forces the question; to what extent can the SRL research resist its neoliberal associations if it underrepresents those that are most affected by neoliberal forces? Before this question is analyzed more closely it is necessary to first define and understand working class culture.

Paul Willis’ Learning to Labour: How Working Class Kids Get Working Class Jobs (1977) is an appropriate place to start an analysis of working class culture and its manifestation in education. Unlike the positivistic research discussed above, Willis’ research uses qualitative approaches and provides ethnography, containing three years’ worth of interviews. Willis’ participants are working class boys (named “the Lads”) in a small working class neighbourhood in England. The Lads are tough and hardened from their upbringing in a low-SES environment and explicitly reject school as an institution by constantly misbehaving. Willis (1977) illustrates how these adolescents are a victim of their own culture and the respective sexist, racist, and immature attitudes that go with it. This is not to say that the lads are inferior or maliciously racist/sexist, rather, the culture in which they are immersed in breeds low expectations, resistance, and a fear of change and is manifested in misbehaviour. This counter school culture is seemingly fixed in the ‘Lads’ and that this culture embodies a type of ‘self-damnation’ that contributes to the adolescents’ submission in their increasing acceptance of subordinate and meaningless roles in society (Willis 1977, p.113). It is this that binds the Lads to their socially
stagnate roles. In his introduction Willis states that “[t]he difficult thing to explain about how middle class kids get middle class jobs is why others let them. The difficult thing to explain about how working class kids get working class jobs is why they let themselves” (Willis 1977, p.1). This however, should not be taken out of context to blame the students for their own failures, rather, what Willis is trying to express is how these kids fall victim to a ‘learned-helplessness’. In fact, Willis (1977) explicitly warns (p.73) against developing simplistic and problematic conclusions, such as blaming the students or parental attitudes, in an attempt to come up with explanations. Willis (1977) acknowledges that these forces do have a role but they are not the catalyst in rendering these students to the same fate of their disgruntled fathers working dead-end working class jobs. Rather, Willis (1977) ultimately concludes that the counter school culture of the working class, set forth by social-Darwinist neoliberal pressures, is the biggest culprit in this scenario. More specifically, by focusing on individualistic gains these pressures strip education of its community origins and place it in large organizational settings which conduct the bidding of the capitalist economy by promoting a ‘human capital’ and inserting students into the working classes (Willis 1977, p. 189). This promotion of human capital and the assembly line model of education are the direct result of neoliberal forces and can likely arise from the application of an uncritical SRL theory.

The insight into working class culture provided above is necessary to understand fundamental assumptions that are made within SRL research. Vassallo (2013a) addresses this and points out that leading SRL theorists (such as Corno, Perry, Zimmerman, etc.) recognize that guardians play a key role in the development of student SRL. However, in order for SRL to be encouraged parents should not only be authoritative but also “need to learn routines and participation structures in high SRL classrooms” and then model this behaviour (Corno 1989,
This specific type of childrearing neglects working class parents, as they largely belong to a different culture with different parenting styles (as shown by Willis, 1977) and are often too preoccupied with their working lives to have the adequate time to familiarize themselves, much less explicitly create the necessary SRL structures. Vassallo (2013a) aligns SRL theory to the forces that promote middle class culture, middle class knowledge, middle class dispositions and material realities. He provides an example which mirrors Willis’ study. Vassallo (2012) profiled the daily life of a working class family and noted their routines. He noted that the working class family separated home life and work life; their children never saw their parents do work at home. In order to meet the conditions that are deemed important for SRL development the parents would have to adopt a whole new cultural logic (Vassallo 2012). This finding echoes Lareau (2000, 2003) research which also address that the working class generally have a negative attitude toward school and treat school and home life as separate spheres. Middle class families on the other hand, who largely have benefited from schooling themselves, value schools and dissolve the boundary between home life and school life. This false dualism (which is also highlighted by Dewey and Freire) can be reinforced by SRL literature which requires certain amount of parental commitment for their learners’ regulation (Xu, Benson, Mudrey-Camino, & Steiner, 2010; Vassallo, 2013). Where SRL further exemplifies the gap is under the type of guardian involvement deemed necessary, ones that are associated with middle-class culture whilst ignoring possible difficulties of producing such an alignment for individuals who don’t belong in that culture (Vassallo 2013). Vassallo explains that in order for guardians from economically disadvantaged roots to encourage self-regulation SRL theory requires them to “learn new rules of engagement, form different kinds of relationships, alter self-perceptions, shift child rearing logic, and mitigate the effects of their
occupations” (Vassallo 2013). Additionally, it is important to note that Vassallo and Lareau are not suggesting a cultural deficit in working class families; instead it’s the SRL framework which needs to devote a more critical view in order to capture class-specificity of regulation (Vassallo 2012). Working class family’s practices give forms to particular kinds of regulatory structures they just tend not to be valued in school (Vassallo, 2012). These unrealistic and unfair expectations put an additional burden on working families and perpetuate this neoliberal idea that their knowledge and practices are inferior and as a result are responsible for their own shortcomings; instead of addressing the endemic social inequalities that proliferate these injustices.

4.3 Critical Interpretations of Agency in SRL

The problematic implications of an uncritical SRL have been shown by analyzing its parts; the conceptions of the self and its conceptions of culture, in that they promote neoliberal values. The individualistic self-aligns itself with neoliberal ideals of individual rights and private wealth and the conceptions of culture favour classes who are already benefitting from this neoliberal environment. However, the pitfalls of SRL can also be found holistically, in the sum of its parts. The ethos of SRL is problematic in that it emphasizes “regulation.” Although SRL has the potential to create change through harnessing student agency, the assumption that it is value neutral forces learners to be adaptable. Leading SRL researchers (such as Schunk and Zimmerman) frame SRL in terms of adaptation to learning tasks (Vassallo, 2011). This is antithetical to critical pedagogy which wants to harness individuals who are able to make their environment adapt to their needs as opposed to vice-versa. As Vassallo (2014) explains, a feverish focus on twenty-first century discourse causes the notion of adaptability to be framed as personal changes to meet situational demands; the question that remains unaddressed is what
degree do students ultimately participate in the formation and transformation of their situation? Ironically, SRL theory is presented as an empowering activity yet its fundamental view of regulation is actually cultivating behaviour management (Vassallo 2014). Additionally, the power of the regulation knowledge itself promotes a banking concept of education. Within SRL literature it is assumed that the educators possess the types of regulation epistemology (e.g. regulation scripts, metacognitive strategies, emotional control techniques, etc.) deemed necessary to educate students. This is heavily problematic as it describes the specific issue Freire warns against, banking education. As described earlier, Freire sees the banking system and the adaptation to banking, as mechanisms of control and subordination because the onus of change is on the oppressed by a need to adapt to these regulations and not change the environment that oppresses them (Vassallo, 2012).

Vassallo, and other critical theorists, have built a strong case warning of the dangers of the educational applications of an un-critical SRL. Various sociological theories; Functionalism, neo-Marxism, Symbolic Interactionalism, and Cultural Reproduction Theory, were used to highlight dangers from the focus of heavy positivistic psychological trends. The fact that these criticisms exist, largely unopposed, goes further to strengthen their legitimacy.

4.4 Reception of Critical Interpretations

At the time of this publication, the one moderate exception is a short article by Allyson Hadwin (2013) explicitly replying to Vassallo (2012). Hadwin (2013) is not directly opposed to him and, admittedly (p.214), concurs with many of his claims. However, she brings attention to the idea that the existing varying social realities, identified by Vassallo, can actually strengthen SRL by giving leaners opportunities to hone their skills in multiple environments. Additionally, she agrees with contextualizing SRL historically and suggests that this process encourages the
acknowledgement of a wider variety of life challenges in affording opportunities for SRL (Hadwin, 2013). In essence this is not contradictory to Vassallo, as he never formally disavows SRL. Instead Hadwin softens Vassallo’s harsh language and perhaps makes the much needed critical interpretations more accessible to researchers who are unfamiliar, perhaps even wary, of critical pedagogical interpretations.

As previously discussed, there is an apparent absence of critical pedagogy within SRL. However, that does not necessarily mean that Critical Theory ideals are not incorporated in some of the viewpoints. Also previously established, SRL is not one solid theory from one viewpoint. The weaknesses that can be found from the fragmentation of the theory can also be some of its strengths. Criticisms of SRL theory are appropriate for heavily positivist viewpoints like behaviourism and information processing theory (IPT) but the same criticisms will find support within phenomenological and Vygotskian viewpoints of SRL.

5 Examples of Uncritical Theory within SRL Theory

Within the range of SRL research there are large sections of work that are largely uncritical and lend themselves to the neoliberal ideals (mentioned above). Behaviouristic views of SRL are an example of this. Behaviourism as a whole has positivistic roots with theorists like John Watson who disavowed studying internal processes; he considered anything unobservable or immeasurable was therefore unscientific (Watson, 1913). Over the years behaviourist viewpoints of SRL have transcended Watson’s strict rationale but are still heavily positivistic and problematic for capturing relevant invisible, cultural, processes. Overt reliance on behaviourism runs the danger of dehumanization as learners are viewed as victims of their instinctual reward/punishment mechanisms. Within this framework, regulation or self-control involves
negotiating between immediate and delayed rewards and behaving in a manner that favours results the greater, longer lasting, reward: “… for without multiple options [rewards] from which to choose, the description of self-regulation does not apply” (Mace, Belfiore and Hutchinson, 2001, p.42). For example, research within behaviourism of SRL argues that effective self-monitoring increases adaptive behaviour like; time on-task, work completion, and accuracy of letter writing, while reducing “maladaptive” behaviour, like time out-of-seat (Mace et al. 2001, p.45). Quickly, the dehumanization that is being called to attention be critical pedagogues becomes quite apparent. Applications of behaviourist views of SRL treat learners like Skinnerian pigeons whereby they are deemed successful only if they complete the task at hand in a prescribed manner. The complex feat of being educated cannot, and must not, be reduced to such rudimentary tasks or ‘drudgery5’ (Dewey, 1997).

Behaviourism is a relevant psychological theory but has largely lost its stranglehold on modern psychology. With the advent of computers and the trend of using them as metaphors for our brains more biological and cognitive theories have been placed in the limelight. Information-processing theory is an example (IPT). In short, IPT focuses on cognitive development that is rooted in our biological make up and learning is viewed as the sum of the interaction between these biological properties. IPT focuses on the intricacies of the human brain but still gives a mechanical view of learners. In IPT focuses on working memory, short term and long-term memory and cognitive load mechanics. These processes should not be minimized as they have many useful educational applications (Kirschner, 2002). The problem manifests when these processes are prioritized to the point where learning is reduced to the sum of its parts. Critical theory warns educators not get too caught up on manipulating this processes by strictly teaching

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5 Drudgery, is a key idea for Dewey and is emblematic of the antithesis of education: “Every divorce of end from means diminishes by that much the significance of the activity and tends to reduce it to a drudgery from which one would escape if he could” (Dewey, 1997, p. 106).
content knowledge and treating learners as a receptacle to be filled. In SRL framework, IPT viewpoints focus on the specific strategies which influence regulation. It uses formulaic examples (e.g. If→Then→Else) to set the stage for exercising control (Winne, 2001, p.162). Although, it is important to take into account how exactly people learn and scaffold accordingly, IPT is inward focused, does not take into account other social factors, and is too caught up on regulating the learner as has been already shown to be problematic by critical theorists.

However, not all SRL viewpoints operate in such strict positivistic ways. The original criticisms, previously discussed, stated that: SRL’s conception of the self was highly individualistic, that it idolized middle class virtues and that it forced a disingenuous sense of agency as it favoured regulation as opposed to change. Yet analysis of both phenomenological and Vygotskyian viewpoints offer alternatives to these critiques of SRL and indeed incorporate tenants of critical pedagogy theory.

6 Examples of Critical Theory within SRL Theory

The phenomenological view of SRL has strong critical research base as it opposes positivistic methods by focusing its line of research on non-observable phenomena. Phenomenological views contrast heavily with the aforementioned views by reversing its scientific methods by advocating that psychology must first begin with an analysis of the whole (humans and their characteristics) and only then proceed to agree on the sum of its parts (the specific techniques that are most appropriate to their characteristics) and never the reverse (McCombs 2009, p.73). This orientation is supplemented by the notion that psychology needs philosophy.

As a result phenomenological views combine education psychology with philosophy by borrowing from Maslow, Heidegger, Rogers and other Humanists to develop a sound theory that
seeks a deeper understanding of SRL and the human consciousness. McCombs (2009) highlights this by providing an in-depth analysis of the phenomenological’s view of the self in relation to SRL. It is true that she does not devote much attention to communal self (Martin 2008) but she does provide insight on how to foster an equally important topic: consciousness. The phenomenological view centers itself on constructing experiences that produce actualized individuals as defined by the extent to which they have a positive sense of self, identify with others, and open to further new experiences (McCombs 2009, p.70). This parallels Dewey’s notion of creating meaningful experiences that foster actualized growth. This notion, which features critical elements, is incorporated to SRL classroom applications. For instance, McCombs (2009) quote on discussing conditions that best foster SRL highlights this:

SRL by definition is only possible in contexts that provide for choice and control…to achieve goals of SRL students must have choice and autonomy; schools must provide both an engaging curriculum and a caring community. Community is not enough, we need autonomy, too. In fact, when both of these features are present, there is another way to describe the arrangement that results, it is called democracy. (McCombs 2009, p. 111)

Here, it can be determined that both the works of Dewey and Freire are embodied by the empowerment of learners through the emphasis of democracy and community.

This is not to say that SRL critics entirely overlooked the phenomenological view of SRL as its ideas still need thorough critical interpretation. For instance the phenomenological interpretation purports a view of SRL that is a:

“A natural response to learning opportunities that is the result of: (a) self-evaluations of the meaning and relevance of a particular learning opportunity relative to one’s personal interests, needs and goal; (b) an understanding of one’s agency and capacity for self-regulation; and (c) contexts that support perceptions and or meaningfulness and self-control. (McCombs 2009, p. 99)

This excerpt can be simultaneously used by different educators to promote both: (a) societal change by elevating disenfranchised youth toward opportunity by taking into account
their goals, interests and agency; and alternatively; (b) reinforce the status-quo by assuming that a learners’ goals, interests and agency (or lack thereof) are genuine and not a result of learned helplessness forced down by societal institutions [e.g. The Lads in Willis (1977)]. In summary, adaptations of self-regulation, even ones with democratic intentions, can easily be interpreted to stream learners based on individualized interpretations of their goals, interests and agency toward human capital. To prevent the latter and promote the former, critical pedagogy must remain prevalent and the socio-historical contexts must be explicit.

Vygotskian theory takes into account these socio-historical contexts into its formulations. Vygotskian theory is founded on critical tenants, as it is based on Karl Marx who played a crucial role in Vygotsky’s mind (Vygotsky, p.7, 1980). This in turn translates to critical elements in its views of SRL. SRL researcher McCaslin & Hickey (2009) agree, calling Vygotsky a “vowed Marxist” and explaining that both theorists view “Consciousness, [a]s an active constructor of experience … is [an] ability to control one’s behaviour that frees the individual from specific situations” (McCaslin & Hickey, 2009, p.228). From this initial starting point one can see that such a view incorporates both Deweyan ideas of experience and Freire’s idea of emancipation from oppression.

In relation to SRL this manifests in the ways the self is interpreted. As established by Martin (2008), and reiterated by Vassallo (2012); it is important to be cognisant of the socio-political implications SRL’s conception of the self as highly individualistic. Their critique however may be accurate of mainstream SRL literature, with Zimmerman being the frontrunner, but is not in fact accurate of SRL research as a whole. Within this Vygotskian view, McCaslin & Hickey (2009) explain that:

The individual is intricately a part of perceived social world; thus self-knowledge is not independent of knowledge of others. One could argue then, and we do, that
reports about self are not interpretable without a context of “perception of others” within which to analyze them; nor is a student’s specific interpersonal approach and response apparent in a learning situation without understanding interpersonal influences of home and school. (p. 238)

This mirrors quite strongly Martin’s (2008) argument that SRL should embody and emphasize a communal self. This emphasis may be missing in the mainstream literature but it is after all featured in a chapter of a quintessential review of SRL and academic achievement edited by Zimmerman himself (Zimmerman and Schunk, 2009).

In this vein, further clarifications and support can be found in the Vygotskian views of SRL to support shared and co-regulation of learning. The collective is essential for Vygotskian theory and this is expressed in the goal of co-regulation. McCaslin & Hickey (2009) articulate this as:

In co-regulation the ultimate goal of educational system is not [emphasis added] to shift the individual the burden of pursuing his own education… Co-regulation connotes shared responsibility, the goal is self-regulation that is instrumental to socially meaningful activity that ultimately enriches the culture. (p. 243)

That passage is complimented by;

CR [co-regulation] is based on the idea that humans have a biologically linked, basic need for participation… and that emergent interaction is the process through which individuals come to mediate and internalize [or resist] social and cultural influences. (McCaslin 2009, p. 144)

Both these interpretations fully incorporate the social and even allude to resisting oppressive environments. Vassallo (2014) does not do these interpretations justice when he accuses Hadwin et al., (2011) of “ostensibly” using the terms “co” and “shared” to detract from the underlining self. This is because for Vassallo (2011, 2012, 2013, and 2014), SRL is interpreted as intrinsically tied to neoliberalism and that applying it in shared contexts does little to ameliorate the theory. For instance, if SRL can be momentarily equated to selfishness; a shared or co-selfishness may help the group that is privy to those benefits of shared-selfishness
but does little for the wider population who are not. In Hadwin et al, (2011), “co-“and “shared”
regulation are discussed in isolation (perhaps done intentionally to analyze what each adds to the
concept) which makes regulation look more mechanical in a critic’s eyes than as perhaps
intended. For instance, the following excerpt references a McCaslin that is entirely different
sounding than the ideological McCaslin quoted previously:

McCaslin and Burros (in press) examined the emergent relationship between
classroom activity and individual regulation by observing classroom dynamics
and tracking student self-monitoring and regulation of knowledge and beliefs, and
relating those to academic performance measures. This research systematically
examines changes in co-regulation as well as its sensitivities to cultural context
and factors. (p. 76)

In essence, even though Hadwin et al (2011) referenced Vygotskian ideals by quoting
McCaslin through-out their chapter; co-SRL and shared SRL are discussed in an in-
depth/technical manner that give way to Vassallo’s neoliberal connections as opposed to the
larger encompassing and critical contexts discussed in the Vygotskian viewpoints chapter by
McCaslin (2009). This ultimately does not give Vassallo a free pass in heavily criticizing a
theory without fully taking into account all its perspectives, but it does go to show the multitude
of interpretations that the viewpoints portray.

In summary, this section will be concluded with another excerpt from McCaslin &
Hickey (2009) which embodies the essence of this thesis:

_All [emphasis added] psychological theories are inherently political. Perhaps the
construct of self-regulation simply magnifies the broader issue. For example, one
goal of SRL research may be to enhance the development of self-regulated
learning, for the purpose of individual empowerment, to free the individual from
the immediate environment by promoting self-direction and planfulness. Another
may be to free the socio-instructional environment (SIE) from responsibility for
the individual: SRL suggests that learners can teach themselves. A third potential
goal of SRL: character education and promotion of student self-control and
conformity through repeated messages, for some charter educators SRL is all
about obedience…Modern school reform is all about holding students accountable
for their lack of cross-national competitiveness. Hard work, high expectations,
and higher standards are the panacea. Students who are unable to profit from instruction or who are unable to compensate for inadequate instruction – who cannot teach themselves- are to be retained if unable to perform on mandated tests…in short it remains especially problematic that educators remain unaware of educational and political dynamics in their work, because bits-and-pieces-approach on the classroom in the belief that one is political neutral often results in applications that are anything but neutral. (p. 237-8)

This idea is vital to this thesis but stopping here is premature to the essence of education from critical pedagogical perspectives. Although, Phenomenological and Vygotskian viewpoints of SRL offer more critical insights than their counterparts it still does not adequately address equity issues (e.g. power dynamics and issues of oppression) which facilitate transformative education.

**7 Conclusion of Critical pedagogy Theory and SRL**

To conclude the section on combining critical pedagogy theory and SRL it is important to make some final clarifications. For instance, it is anticipated that future critics of this thesis may raise accusations of hypocrisy for mirroring the same harboured political ideologies – albeit from the opposite side of the political spectrum – that are being critiqued. However, this would be a false equivalency. The qualitative difference between this work and the aforementioned critiqued perspectives is that this theory openly acknowledges, analyzes and makes its values available for deconstruction while traditional SRL theory hides its biases under the pretence of objectivity. In other words, it is my opinion that when tackling political infused issues like education it is more epistemologically conducive to be value laden in an open manner than to falsely (or mistakenly) presume value neutrality.

Additionally, critical pedagogy rejects commitment or alignment to any one particular method. Therefore, critical pedagogy itself is not a single method that dictates a style of a
particularly pedagogy. Rather, it is a lens that empowers both the educator and the learner by providing them with a third perspective (i.e. a bird’s eye view) of the learning process and allows possible hindrances to be questioned by promoting a critical approach. Critical pedagogy is itself self-reflective and critical of its own inner workings (for detailed critiques of critical pedagogy see: Gable, 2002; Tinning, 2002). A relevant example to this context is argued by Giroux (1983) – himself, a prolific contributor to the critical pedagogy field – who highlights how there is a need to develop the distinction between the types of language within the field between the "language of critique" on one hand, and the "language of possibility" on the other. He continues, by explaining that although both are important to identify problems; critical pedagogy needs more emphasis on the ‘language of possibility’. This distinction appears relevant to present critical SRL discourse.

In this study my values lie in the idea that education should embody a process where learners are empowered by experiences that promote equitable change to themselves, their community and society as a whole. This is not antithetical to SRL theory, however to ensure that SRL does not stray to other mechanical interpretations (as pointed out by McCaslin & Hickey 2009) it is argued that SRL theory needs to be accompanied with critical pedagogy theory. This reasoning has already been concluded by Vassallo (2013b). This thesis continues this tradition and, moreover, attempts to avoid the already established ‘language of critique’ and establish a ‘language of possibility’ approach. To test this, a case study involving an SRL based school will be conducted. However before the method of this case study is broken down further, a stronger theoretical framework is needed. Principally, it is necessary to practically define the classroom application of critical pedagogy and then investigate the extent to which these notions of critical pedagogy are relevant to the given SRL School and its Finnish societal context.
8 Application of Critical pedagogy: Transformative Education

Transformative education is not something tangible that can easily be isolated or defined. Rather it is a process in which educators engage with learners that leads to progressive change. At the school level, change is usually not profound and usually consists of minor rearrangements as opposed to wider more sustainable progressions (Nyroos 2007). As a result of these nuanced changes it is necessary to ground findings to critical theories in order to begin to identify transformative processes. We’ve borrowed heavily from leading theorists in critical pedagogy to establish our framework. In that vein, we borrow locally from Finnish critical pedagogues Maija Lanas and Tomi Kiilakoski (2013) to expand this idea of progressive change to an idea of large transformation: an “epochal transformation involving dramatic or major changes on both a subjective level, of experienced identity and pedagogical thinking, and an objective level, of changes in the teaching process.” They cite Jack Mezirow (2000) to further explain this conception:

Transformation refers to a movement through time of reformulating reified structures of meaning by reconstructing dominant narratives… We transform frames of reference – our own and those of others – by becoming critically reflective of their assumptions and aware of their context – the source, nature, and consequences of taken-for-granted beliefs. (Mezirow 2000, p. 18 cited in Lanas & Kiilakoski 2013)

This explanation eloquently states the scope and the framework necessary for the type of environment that may gestate such transformation. In this paper, it is not the author’s goal to necessarily promote or create a transformation of this scope; rather the goal is to determine if an SRL based school has the framework necessary to harness this change with their learners.

In Finland educational policy offers teacher remarkable freedom, yet teachers frequently feel restricted in their practice (Lanas & Kiilakoski, 2013). The SRL School, which is the focus
of this paper, should be an exception to this as its ethos is centred on agency and as a result its educators should not show the same constraints as teachers from the general population. The extent to which this reasoning applies and the ways in which it is applied in practice, will be investigated.

9 Application of Transformation in SRL Schools

However, it is important for one not to get lost in the theoretical complexity and lose sight of the pedagogical praxis required to promote such an educative outlook. The SRL School has an already established system that guides its learners toward achievement. This is not mutually exclusive with SRL; rather like SRL, transformative learning develops autonomous thinking (Mezirow, 1997). The question is whether this achievement aligns itself more with neoliberal market based education or if it breaks free from this tradition and promotes transformative growth. In other words, whether or not the SRL School prepares its learners for a world inhabited by their parents and teachers or, alternatively, a world that they themselves will have to create and inhabit (West-Burnham, 2009). To assess this, the extent to which critical pedagogical tenants, including: community and collective sense of self, dialogue, reflection, love, critical thinking and social justice are manifested by the educators will be analyzed. More concretely, certain assumptions will be used as a guide to facilitate such analysis (Table 1).

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<th>Assumptions Underpinning Schooling which favour Neoliberal trends</th>
<th>Assumptions underpinning education that promote Transformative initiatives</th>
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<tr>
<td>Intelligence is measurable and fixed</td>
<td>Intelligence can change and grow; it is multi-faceted and has to be measured using a range of techniques.</td>
</tr>
<tr>
<td>Learning can be measured through the replication of information</td>
<td>Cognitive development in the early years is pivotal to all subsequent learning.</td>
</tr>
<tr>
<td>Learning is chronologically determined</td>
<td>The family and community are more significant variables than the school.</td>
</tr>
<tr>
<td>Knowledge is made up of objective facts.</td>
<td>Learning has to be measured through the demonstration of understanding.</td>
</tr>
<tr>
<td>Knowledge can be divided into autonomous subjects that have the status of a canon.</td>
<td>Every individual learns at a different rate; learning is non-sequential</td>
</tr>
<tr>
<td>Competition and individual performance are the most powerful motivators</td>
<td>Knowledge is created through relationships</td>
</tr>
</tbody>
</table>
Prior learning and learning outside the school are marginal. | Subject knowledge is less significant than cognitive and emotional development.
---|---
All people learn in the same way | Profound learning requires intrinsic motivation and collaborative approaches
Time and space must be uniformly regulated. | Most learning takes place outside the school.
The disciplines of life in school are a preparation for adult life | Every individual has a unique permutation of learning styles.
When and where learning takes place must be decided by the learner. | Full engagement in the community is the best preparation for adult life.

Table 1 Assumptions underpinning school ideologies adapted from West-Burnham, J. (2009). *Rethinking educational leadership: From improvement to transformation*. Bloomsbury Publishing

Adapted from John West-Burnham’s book on Rethinking Educational Leadership (2009), Table 1 lists key qualitatively different assumptions of school ideologies. Clearly this thesis supports assumptions from the second column but in the creation of such a table it should not be inferred that a dualism is being created (which has been previously denounced). Rather, the second column purports an extension of the first column’s limitations, ultimately providing a more inclusive and progressive educational outlook. Thus in order of the SRL School to be considered transformative it should build passed the stifling assumptions in neoliberal trends and build toward assumptions in transformative initiatives. In order to successfully accomplish this, a thorough analysis of the context in which this dynamic takes places is necessary in order to properly situate the theory and practice.

10 The Finnish Context: An Introduction to Finland’s Educational System

As previously mentioned, when practicing critical pedagogy, it is first important to contextualize the historical, cultural and environmental realities of learners. The majority of discourse

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6 The original author did not use the term ‘Neoliberal assumptions’. Instead they contrasted transformative assumptions with ‘school assumptions’. However, within the literature West-Burnham describes ‘school’ as the traditional, industrial revolution model school which continues to purport assembly line learning and human capital. This description is highly conducive to neoliberal mantra. As a result, for clarity reasons, this research contrasted the underpinning transformative assumptions of education with underpinning neoliberal assumptions.
produced by critical pedagogues (Giroux 2002, McLaren 1998, Freire (2000), among others.) focuses on mitigating the injustices produced by systematic inequalities by promoting change and equity through emphasizing feelings of hope and love. However, a large part of the research within critical pedagogy focuses in inequalities that exist within the Americas. The question that arises is to what extent is critical pedagogy relevant in other countries, specifically those that do not have widespread inequality stemming from large class disparities? Below, an introduction to Finland’s educational system will be provided and will be accompanied by an argument as to why critical pedagogy is still a relevant lens to analyze Finnish educational practices.

Finland, a small northern-European country, has recently garnered international attention to its education system through its high rankings in the OECD-led PISA surveys (FitzSimmons, Uusiautti, & Suoranta 2013). This success has led to an influx of “PISA-tourists” in search of the secrets to Finnish success (Phillips and Schweisfurth p.50, 2014). These ‘secrets’ however, are not magic formulas that can be easily utilized in other contexts; instead, as stated by Pasi Sahlberg (who has had a successful career traveling the world explaining the Finnish model), Finland’s educational success is a direct result of decades of commitment to establishing educational policies and the development a strong public system which promote equal opportunity for all (Sahlberg, 2011). These polices have led to milestones that are experienced by few countries, including: schools that are free of charge (for both citizens and foreigners alike – including post-secondary education). This free education is supported with comprehensive services, including: health care, hot meals and, if necessary, transportation (Holm and Londen, 2010). Nearly all school-aged children (98%) complete their basic schooling (National Board of Education 2008) with 50% of class sizes consisting of fewer than 20 pupils (Lavonen 2008).

The above statistics illustrate Finland’s commitment to education. There are many
proponents of the Finnish system and the reasons become quickly apparent as Finland’s commitment runs deep to its core values of education. The most important objective for the Finnish system is to foster lifelong learning through a highly respected and democratic relationship between teachers and learning communities (Kumpulainen and Lankinen 2012). This value (as opposed to an authoritarian one) is crucial for any thriving democracy as it creates a “democratic and consensus-seeking ethos” that is essential for citizenship (Toom and Husu, p. 45, 2012). Toom and Husu (2012) go on to illustrate that this phenomena is sustained because of the socio-constructivistic conception of learning that is emphasized by the National Core Curriculum (2004, pp. 12–16). These ideas are further solidified by widespread, popular support that characterizes the Finnish mindset toward education (Niemi et al. 2012).

This mindset is closely linked with core values of critical pedagogy as it embraces and integrates the feelings of hope and love to pedagogy. On one hand, Finnish educational policy attempts to adopt Kohl’s (1998) idea that teaching should be seen as both a practice and a discipline of hope because it is a valuable resource that orients learners toward social action by motivating students and encouraging willingness to learn (Toom and Husu, 2012). On the other hand pedagogical love is also reinforced by a fostering a caring relationship between educators and learners, as it is necessary for purposeful teaching (Tirri, 2012). In policy, these two interrelated feelings are incorporated by the Basic Education Act, that not only ensures “a supportive learning environment that promotes interaction and dialogue” (National Core Curriculum, 2004, p. 17) but also through its commitment to small, autonomous community schools which are conducive to these tenants (Toom and Husu, 2012). In summary, the major aim of Finnish education is to encourage the growth of all learners and provide further opportunities for the enjoyment of learning (Kumpulainen and Lankinen 2012). This Deweyan
growth accompanied by hope and love may lead people to think that Finland is an educational utopia. However, this does not mean it cannot be improved.

10.1 Critical pedagogy in the Finnish Context

It is reasonable to assume that most countries have documents outlining lofty goals of their education system but that somehow do not translate into practice. However in countries where these inequalities appear less obvious, due to strong social welfare nets for instance, critiques and improvements of the system may not be as pronounced. However, the relevance of critical pedagogy in Finnish contexts is apparent in two significant ways. First, theoretically, it is useful in ensuring that the significant educational gains that have been successfully fought for and established in policy are maintained and not taken away. Secondly, more practically, it is useful as a compass to guide practitioners and ensuring that these achievements are equitably applied especially in the face of changes.

10.2 Maintaining the Finnish Educative Tradition

Whereas critical pedagogy is used in North America to ensure a strong public system (Labare, 1997) Finland must struggle to ensure it does not lose its strong public system (Tomperi, 2008a). The type of squabbling and antagonism that exists between right and left-wing North American politics – that is corrosive to education – is not necessarily reproduced in Finland; rather it is exchanged for an antagonism between ‘soft/unproductive sectors’ on one side, and ‘hard/productive’ sectors of society which push for market driven education (Svingby, 1995). This pressure has been present since Finland joined the European Union, in 1995, as neoliberal forces maintain that income disparity acts as an incentive to keep the “talented” motivated (Svingby, 1995) and pressure education toward market driven system and away from its social-
equity foundations (Rinne, 2000). In Finland this threat has been largely kept at bay as demonstrated by the previously mentioned successes in policy and egalitarian society but critical pedagogy needs to remain vigilant to ensure this continues. To avoid complacency the struggle needs to be fuelled by educators and learners alike in hopes of maintaining the Finnish tradition.

In Finland, educators need to be comfortable with critical pedagogical practices in order to properly implement existing educational policies. When analyzed more closely, the gap between what is said and what is done in regards to critical values in education becomes more apparent. Students in Finland tend to finish at the top of standardized tests but at the same time seem to be dissatisfied with educational institutions. Both popular media (Helsinki Times, 2013) and academic studies (WHO research by Kämppi et al., 2012) have reported that students have a general negative attitude toward schools as institutions are increasingly neglecting learning for the joy of it (FitzSimmons et al., 2013). This has drastic repercussions for Finnish society as a whole. Students may know the intricacies of how democracies work but their motivation to participate is lower than in other OECD countries (Kupari & Siisiäinen, 2012). Furthermore, Feldmann-Wojtachnia et al. (2010) compared Finnish and German youth and concluded that direct democratic procedures to influence one’s own life and community need to be better recognized by Finnish schools. These findings between written policy and what is demonstrated at the societal level appear contradictory. This inconsistency stems from a misalignment between what happens at the policy level and at the teacher level as educators do not often use the freedom they are given (Lanas & Kiilakoski, 2013). Educators need to be comfortable with aspects of critical pedagogy in order to bring a call to action with their learners.

In essence, it is less important that Finnish students finish number one on standardized test and more important that they are self-actualized, eager learners, able to use their voice to
promote social betterment. The Basic Education Act, Finland’s Youth Act of 2006 and other progressive policies appear to set the framework for transformative education but more needs to be done to ensure students are motivated to improve themselves in their local contexts. This is where the relevance of critical pedagogy emerges. A critical pedagogical outlook promotes change by combining Freirean theory and practice and offering insights to educators that emphasize neoliberal pressures and its effects on school life (McLaren, 2010). FitzSimmons et al. (2013) lay out three tenants for critical pedagogy in Finnish contexts. First, it promotes the active use of reflection by educators and students. As mentioned reflection allows for intimate consideration of the presented information and generates critical engagement of ideas. Secondly, involves educators to explicitly implement dialogue and help learners find their own voice through active discussions. And lastly, to combine everything together, educators need to facilitate action. Within this third tenet, FitzSimmons et al. (2013) explain that change can occur to promote social improvement. Of course, it is not realistic to assume that both educators and learners will always reach this third tenant. This is ultimately desired, but it is the journey of the learning and discovery processes that are more important than the actual destination. This application of critical pedagogy instils the realisation that learners are not alone, but exist in a wider community made up of other learners ready to promote action together.

In summary, a critical pedagogical mindset is needed to resist complacency and encourage action in preserving egalitarian Finnish traditions. This type of action and sense of purpose is relevant in all levels of learning and paramount for primary education as well. Critical pedagogue of Tempre University, Tuukka Tomperi describes several ways in which children are significant in political discourse (2008b). Principally, Tomperi explains, that young children may not have an explicit role in political discourse but ultimately are political actors in the same way
that nature can be a political actor: as a force that generates momentum to be counted on by other political actors (their parents, caregivers, etc.). To further extend the nature comparison, educators need to care for learners and provide the appropriate nutrients for learners to grow and flourish – if not for their immediate sake, for the sake of sustainability. Tomperi further argues that one must not make the mistake of using the denomination “children” as homogenous; that children have ethnic, economic, cultural, and gender differences that play crucial roles in not only agency but cognitive and moral developments (Tomperi, 2008b). Tomperi’s warning highlights the second way critical pedagogy is relevant to the Finnish educative system: the application of a multicultural togetherness.

10.3 Enacting the Finnish Tradition with Multiculturalism

The second main role of critical pedagogy is to act as a compass to guide practitioners in the face of change. A big change that has reached Finland in recent years is population change and the emergence of new cultures.

Multicultural education in Finland is problematic in two key ways: first, the pre-existing diversity that already exists within Finns is not considered as part of multicultural education and is exclusively targeted to visible minorities. Secondly, the programmes that are used with minorities need to be less top-down and more reflective and embrace the wider community.

Finland is largely considered to be a homogenous country, however upon closer analysis one sees that this is not so clearly defined. Finland consists of two national languages (5.5% of the population speaks Swedish), two national churches (Lutheran and Russian Orthodox), is home to indigenous Saami people (Räsänen, 2008, Holm and Londen, 2010). In addition to this, within the last two decades, Finland has witnessed a growing immigrant population (Holm and Londen, 2010). These demographics are not particularly challenging to education, but it is
important to fully understand the multicultural contexts. Indeed, while current curriculum policies do emphasize attention to multicultural education, the problem lies in that it applies only to visible minorities and does not incorporate cultural differences within Finnish traditions (Räsänen, 2008). This often results in multiculturalism only being covered during special events, often extracurricularly, and creating an *othering* between “us” (Finns) and “them” (non-Finns) (Räsänen, 2005, Suurpää 2005). Although these programmes raise awareness of cultural differences, the majority of the curriculum practices emphasize a borderline between the two groups by creating a binary divide (Suurpää 2005) instead of a more inclusive environment. This not only ignores particular needs of Finnish learners but also translates to a disenfranchisement amongst minority groups and their effects can be seen predominantly, within the Somali (Piattoeva, 2010), Roma (Holm and Londen, 2010) and remote Finnish communities (Lanas, Rautio, and Syrjala, 2013).

Scandinavia, in general, has largely seen itself as historically innocent of race issues (Svendsen, 2014) and this is mirrored in Finland, which has a traditional weakness of being blind to diversity in assuming that its citizens are not only equal but all the *same* (Tomperi, 2008a). A question that remains however, asked by Lanas and Kiilikosk (2013), is how can such othering and disenfranchisement exist with such progressive and accepting polices in place? In part, the answer lies in the fact that educators still tend to act according to implicit national narratives rather than the explicit set policy (Lanas and Kiilikosk 2013). This should not be misinterpreted as blaming teachers for issues in the educational system; rather, it appears that an active sense of critical pedagogy is missing which allows for implicit national and neoliberal narratives to manifest themselves. In other words, educators need to break away from ethnocentric traditions of promoting national unity at the expense of diversity and instead adopt critical perspectives that
incorporate multiculturalism (Piattoeva, 2010). The challenge for educators is to use existing policies and apply them with a critical pedagogical lens to support diversity of their learning communities without losing the Finnish tradition of equality (Tomperi, 2008a).

In summary, multicultural polices must not only embrace and reach out to different communities but must also recognize religious, ethnic, class, and gender differences of minorities and Finns alike (e.g. White privilege⁷). Such an outlook would hinder neoliberal and other cultural hegemonies by insuring that no particular Weltanschauung⁸ is favoured as superior. It is precisely under this context; 21st Century Finland, which critical pedagogy must operate in order to promote a transformative SRL education and by extension promote more than just the self but also wider national and transnational socio-political contexts (Piattoeva, 2010).

11 Method

This research followed a qualitative approach. More specifically, an exploratory field study was conducted to investigate SRL and critical pedagogy aspects within the school environment. Exploratory field studies are traditionally from the field of anthropology (Wolcott, 1975); however, this type of case study was relevant here because our interests in Finnish culture, historical contexts and social elements of critical pedagogy. This exploratory field study was able to provide a more holistic interpretation of the research goals than traditional, positivistic psychological methods. In this ethnographic vein, a single method per-se was not employed in the strictest sense of the word; rather the researcher himself was an instrument of the research (Wolcott, p.116, 1975). This framework borders on action research which embodies the critical

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⁷ A construct that deserves much needed attention in critical contexts, especially within privileged communities similar to Finland, of which to deconstruct its complexity and give it the proper attention it deserves is beyond the scope of this analysis. See: McIntosh (1988) and Allen and Rossatto, 2009
⁸ A German word commonly used in philosophy meaning a “comprehensive conception or apprehension of the world especially from a specific standpoint” (Weltanschauung, 2014).
pedagogical tradition by seeking to break the walls between participant and researcher to ultimately reflect and promote change together (Kagan, Burton, Siddiquee, 2008). In this way, data were collected through participating observation and teacher interviews.

11.1 Research goals

It has been established how the missing critical pedagogical contributions affect both the SRL literature and Finnish society. As a result, the goal of the present research is twofold: First, is to assess the extent to which critical interpretations are applied and/or missing from the selected SRL oriented school. Secondly, to continue critical pedagogy’s tradition of reflection and promote a ‘language of possibility’ by assessing the extent to which staff members of the SRL oriented school are open/value the critical interpretations. Combined, these goals would offer a nuanced interpretation of SRL; one that can be continually applied within the given context to promote transformative education.

11.2 Participants

11.2.1 The SRL oriented program

This study is situated with a Finnish SRL primary school. For confidentiality reasons the program and the school shall remain anonymous; suffice to say that it is a pedagogical development project affiliated with the neighbouring university. The programme consists of students grades 4-6 (ages 10-12) and claims to “modify school life to the 21st century learning needs” by focusing heavily on developing learners’ self-regulated learning (SRL School Poster, 2013). The programmes’ objectives include: To develop the curriculum, to find effective methods to promote self-regulated learning among primary pupils, to develop teamwork among teachers and to enrich multi-locational learning in school contexts (SRL School Poster, 2013). In
short the school is heavily derived from SRL theorists (Bandura, Dignath-van Ewijk, Järvelä, Hadwin, Malmberg, Perry and Zimmerman) and focuses on getting learners to be self-sufficient and study more effectively by supporting their own abilities to self-regulate their learning (SRL School Poster, 2013). The school is modern with new top of the line facilitates and ubiquitous use of technology.

11.2.2 *The selected volunteers.*

There were six volunteers for this study; three of which belonged directly to the SRL oriented programme (see table 2).

<table>
<thead>
<tr>
<th>Pseudonyms</th>
<th>Participants</th>
<th>Context</th>
<th>Volunteered Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>Elementary Finnish teacher</td>
<td>SRL environment</td>
<td>Observed and Interviewed</td>
</tr>
<tr>
<td>Drew</td>
<td>Elementary Finnish teacher</td>
<td>SRL environment</td>
<td>Interviewed</td>
</tr>
<tr>
<td>Jamie</td>
<td>School Principal</td>
<td>School/SRL Environment</td>
<td>Interview</td>
</tr>
<tr>
<td>Morgan</td>
<td>Elementary Finnish teacher</td>
<td>SRL environment</td>
<td>Interviewed</td>
</tr>
<tr>
<td>Tristan</td>
<td>Elementary Finnish teacher</td>
<td>School</td>
<td>Interviewed</td>
</tr>
<tr>
<td>Pat</td>
<td>Educator</td>
<td>Outside School and SRL environment</td>
<td>Interviewed</td>
</tr>
</tbody>
</table>

**Table 1 Participant Breakdown**

It should be noted that for both anonymity and clarity purposes pseudonyms were randomly assigned to participants based on an online-generic list of popular English unisex names (Top 50 Unisex Baby Names, 2009).

All six participants have over twenty years teaching experience, are of Western-European origins, and are from professional middle-class backgrounds. The participants consist of three male and three female educators. Four of the participants currently work within the SRL oriented programme and include two grade six teachers, a grade four teacher and, partially, the principal.
The remaining two volunteers have teaching experience in both Finnish and international contexts and were selected to bring their unique insights. One of which, teaches in the same school but outside the SRL oriented programme; the other is thoroughly familiar with critical pedagogy and is currently teaching another educational institution in Finland.

11.3 Procedure

Before the investigation started, meetings were conducted with the principal and the other participants to introduce myself to the learning environment. One of the elementary teachers (Jordan) was chosen for classroom observations based on these interviews and discussions with the principal. They were chosen for their English communication skills and the extent to which they promote SRL in the classroom. The remainder of the participants were selected for interviews to provide additional and wider perspectives.

Daily classroom observations began at the beginning of the second half of the year, in January, and continued until the Spring Break, in March. Notes of classroom practices and student and teacher activities in relation to aspects of SRL and critical pedagogy used were made in running journals. For the first month the large majority of observational notes were gathered. These notes were accompanied by West-Burnham’s (2009) transformative education chart (Table 1) and were used to provide background and context to the future interviews. During this time the researcher assumed more than just the role of an observer but also the role of a teacher assistant in order to establish a rapport with both the students and the teacher. Daily interactions included but were not limited to: helping students with their math work, socialising, and playing sports/games with students during recess activities, helping staff with 3D printer related issues for future lessons and open discussion on educational philosophies with staff. This was a critical phase of the research to develop a certain level of trust and prove that this research sought to
engage in a dialogue and exchange of ideas rather than an assessment of teacher practices (Angrosino, & de Perez 2000).

After four weeks, during a specified lesson which the researcher felt a critical pedagogical intervention was necessary to promote transformative education, Jordon and the researcher discussed and modified a lesson together. After which, a dialogue with the teacher was recorded using a semi-structured interview (Appendix 2) to measure the value and relationship between critical pedagogy in general and the specific critical pedagogy intervention used in the lesson as well as the aspects relating to SRL to the current context.⁹

Observations, continued, for the remaining four weeks, while 5 other teachers were interviewed to compliment and further expand the observed teacher’s ideas. During this time, a need for a second critical pedagogy application arose with an additional teacher. The idea for the lesson arose after reflection between the teacher and researcher during the interview phase. The lesson was subsequently conducted and the results were discussed with the teacher.

A final, ‘goodbye party’ was held during the last day of research in order to provide closure to the students, researcher, and teachers. At this time, final ideas were discussed and a review of the research was tentatively scheduled to brief the staff on any findings and further promote the ‘language of possibility’ through shared dialogue.

All interviews were fully transcribed. Key information was highlighted from these documents. Notes gathered from the observations were used to facilitate the interview notes and guide possible ambiguities by providing background and context to the content. This practice is aligned to the idea that observational perspectives are supplemental to self-report data to measure

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⁹ It should be noted that the transcripts of the interviews were not included in this thesis for confidentiality concerns. Additionally, it was the opinion of the researcher that the verbatim transcripts would not contribute anything further than what is already specified in the results section. For these reasons the transcripts were excluded. Any questions about the contents of the interviews can be addressed to the authors through e-mail.
educators’ thoughts and beliefs (Ewijk, Dickhäuser, Büttner, 2013). A chart was made to summarize the different interviews using paraphrased answers to best convey the key information (Results Section, Table 3).

11.4 The Interview Tool

This tool (Appendix 2) was constructed by the researcher and was applied in a moderately consistent fashion throughout the six interviews. The interview consisted of a three part structure: First, the introduction which asked for consent, insured anonymity, and introduced the general framework and topic of the research. The second part consisted of short answer questions. These questions were asked in an identical manner to establish a baseline measure for the teachers. Assessing participants’ value of SRL/critical pedagogy was useful for indicating they type of answers they provided.

The final section consisted of the long answer interview questions. These questions relayed a general theme throughout the six participants but were not delivered identically; minor changes were made. These changes were based on the flow of dialogue and whether answers to subsequent questions were already answered previously. Other changes made were based on the content of the questions. For instance; if participants stated SRL had little value to them then there were not subsequently asked what they considered to be a good SRL student.

During this process the overall goal was to avoid researcher influence on teachers’ answers. Both teachers with less critical pedagogy background and those with more were asked questions in similar style: First general questions on SRL were provided to see if critical interpretations developed naturally. Regardless of their reply, specific critiques from the research were subsequently provided to assess the educator’s value of those critiques thereby providing insight to the SRL/critical pedagogy relationship. The interviews then progressed from a more
theoretical level to more practical level when specific critical pedagogy examples were given. The dominant example used was *Maththatmatters: A teacher resource linking math and social justice* by David Stocker (2006) which specifically integrates modern social justice to the math curriculum (Appendix 3). This example was modified for Teacher#2 (Drew) because they did not have a math background. Instead, a critical pedagogy music education example (Abrahams, 2005) was used to compliment the teachers’ music background.

Teacher#2-5 were presented with an example from an activity the researcher observed being used in the school (Teacher#6 was not presented with either example because they were outside the School and SRL context). This example related to a particular brand of chocolates with a problematic label being used for fundraising (Appendix 4). To avoid researcher bias, the label was first presented and only participants’ general thoughts were asked. It was subsequently stated that this label would be considered racist from Canadian contexts and whether or not participants found this label to be problematic in their contexts.

In conclusion the interview was applied to the participants with relative uniformity, excluding the changes described above. These changes were done intentional and methodically practiced. All other attempts at remaining consistent with the research tool were made. Results derived from both the observation and the interviews can be found below.

**12 The Extent of Transformation**

Before a synthesis of the relationship between SRL and critical pedagogy can be provided, it is first necessary to present the extent to which transformative functions within the SRL School were observed. Transformative education is complex and cannot be definitively assessed. To overcome these difficulties, West-Burnham’s (2009) chart will be used as a guide to describe the

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10 Prior to 2001 this brand of chocolates was named *Neekeri Suukkoja* which translates to *Nigger Kisses*. After 2001 the name was changed to *Suukkoja* (Kisses) due to concerns of racism; but the logo of the brand remained the same.
observed transformative functions. Previously shown Table 1, portrays a continuum of inherent assumptions between neoliberal and transformative interpretations of education. Each set of assumptions will be assessed based on the research observations in the SRL School context, starting with the neoliberal followed by the transformative assumptions and finally a summary of both.

12.1 Neoliberal Assumptions Underpinning School Ideologies

1) Intelligence is measurable and fixed

The SRL School environment favoured the transformative underpinning of intelligence being malleable and did not display significant evidence of this neoliberal assumption. There was a slight exception with Educator 2, who mentioned that social justice topics are too difficult for Drew’s students to grasp and preferred to avoid discussions on such issues (re: chocolate box) all together. While the other educators either disagreed with the problem or felt that they handled it in other ways, Drew felt that the critical pedagogical practices were beyond the students’ ability and thus better to be avoided. This does not necessarily imply that Drew felt that intelligence is binary, but certain assumptions/assessments about student ability were made and instead of working around these difficulties the topic was avoided outright.

2) Learning can be measured through replication of information

The replication of information was occasionally observed. In art classes, replication was often used as a method, for example; students often re-printed/painted examples of classic art pieces. This contradicts the idea that “education in visual arts should not remain limited to exploration of a narrowly selected range of pictorial systems that we happen to particularly value” (Kindler, p.344, 1999). Instead it should promote transformational elements and encourage creation and creativity by including more student centred approaches. This is not to say that famous paintings
cannot be rendered by children but the goal should not be to have a class full of “picture perfect” reproductions. Alternatively, these activities can lie “outside of the ‘child art’ boundaries and rely on cooperation of multiple modalities of expression” (Kindler, p.347, 1999). In other words, visual art should be considered as visual problem solving (Parsons, 1998).

The same is true for math education, which relied heavily on the use of repetition and drills and less on problem solving. However, to conclude that students were only subjected to the repetition of facts within the SRL environment would be a gross oversimplification. There was also a heavy focus on cognitive development (the whole SRL process) of learners as students were immersed in a wealth of different experiences (from grammar exercises to skiing and cooking lessons). It is believed that the participating educators would heavily favour the transformative assumption, however due to understandable factors stemming from practicalities associated with the profession; educators occasionally found themselves straying from ideal methods. The educators were open to the researcher about this, and occasionally put themselves down (self-identifying as ‘lazy’ or ‘old’ as opposed to ‘overburdened’ for example) when talking about this. Although, the neoliberal assumption was present, the honesty and awareness of the educators contributed to a consciousness that could also be conducive to transformative functions.

3) Knowledge is made up of facts

As stated in the 2\(^{nd}\) assumption, there was a reliance on the use of facts. The educators within the environment would support a system conducive to the transformative assumption but in practice this was not as clear. During the observations, an emphasis was placed on SRL goal setting and the use gameification to scaffold this. This resulted in concrete and measurable outcomes which are more easily assessed through facts than through a more nuanced demonstration of learning. This was especially prevalent in the multicultural, Asian studies, example previously discussed.
However, it should be prefaced that the educators did not heavily focus on grades and that spontaneous and genuine learning did occur. Rather, the use of SRL and gameification appeared to limit learning (of China for example) to series of facts (rivers, forest types, cities) as opposed to more holistic ideas and dialogue.

4) Learning is chronologically determined

Although the learning activities are based on a curriculum that stipulates a grade’s specific knowledge, a larger effort on student choice and creating various student experiences favoured the transformative assumption. Students had the freedom to pursue their interests which could circumvent any pre-prescribed chronologic order.

5) Knowledge can be divided into autonomous subjects

The division of subjects was clearly present within the classroom environment however; this was used more as a schedule guide and less as a constraint to learning. Not only was there a strong emphasis on pursuing student interest but a strong use of multi-curricular connections were made to blur the lines of each individual subject and instead create a more fluid relationship between the subjects.

6) Competition and individual performance are the most powerful motivators

The extent to which this assumption suggests competition to be considered as “most powerful” cannot be confirmed. However, competition and individual performance was heavily relied upon as a motivator. More specifically, it was used as a scaffold to motivate students with difficulties in SRL.

7) Prior learning and learning outside the school are marginal

There was no evidence of this assumption within the SRL environment. Students were encouraged to pursue their interests and bring their prior knowledge to the classroom as much as
possible. Additionally, the SRL environment focussed heavily on breaking down the barriers of the traditional classroom and heavily encouraged learning to occur outside these walls.

8) All people learn in the same way

There was no evidence of this assumption within the SRL environment. Although, it was determined that SRL was deemed appropriate for everyone and assumed all students would benefit from it; SRL was not applied identically to all students. Instead, clear efforts were made to differentiate instructions and activities.

9) Time and space must be uniformly regulated

There was no evidence of this assumption within the SRL environment; in fact the opposite was true. If activities carried over the allocated time they would continue (even over recess) until a degree of closure was accomplished. The subsequent agenda would be altered accordingly. Additionally, learning space was not confined to the classroom and learning was encouraged to occur outdoors, in the hallways, in private ‘cubby holes’, etc.

10) The disciplines of life in school are preparation for adult life

Although this assumption could not actively be observed, this assumption is definitely present within the SRL environment. This assumption is made clear within the foundational literature of the programme (with its focus on 21st CC) however, teachers remained largely unaware of its emphasis. An interesting finding surfaced when Educator 1 was explicitly asked about this. Jordon stated that they do not see “preparation for adult life” as mutually exclusive to transformational goals. They argued that both can be accomplished. While this may be true, it is important not to confuse the two. A transformational approach does prepare learners for adult life, but a focus on adult life does not necessarily promote transformative functions. Within this environment, the theoretical interpretation of the SRL programme’s goals is deemed problematic
and critical caution is necessary. Nevertheless, elements of a “preparation for adult life” were present and should be questioned accordingly; however, this practice was not focused on exclusively and did not appear to be representative of the SRL School setting.

12.2 Transformative Assumptions Underpinning School Ideologies

1) Intelligence can change and grow; is multifaceted and has to be measured using a range of techniques

This assumption was present within the SRL School environment. Both in the classroom observations of Educator 1 and through the interviews it was found that most educators believed intelligence to be fluid and tangential to grades. Student assessment was varied; often authentic forms of assessments were used, however traditional style testing was also used occasionally.

2) Cognitive development in the early years is pivotal to all subsequent learning.

This assumption was present within the SRL classroom. Notwithstanding the explicit cognitive SRL development, additional efforts were made by the educators to address developmental concerns. Although it was previously stated that the use of repetition and facts were relied on, there was also effort in making sure students practiced learning techniques (written forms, visual forms, collaborative, individual, technology based, performance based, etc.). Additionally, subject material content was not the only allocation of class time. The educators also spent a substantial amount of time on developing social and other developmental needs to aid learners.

3) The family and the community are significant variables to the school

The large effort on student choice and creating various personalized student experiences can be seen as a way of incorporating students’ family and community. Additionally, the educators were engaged with the family and the community in various ways. Not only were the teachers constantly in communication with pupils’ parents but as a ‘teacher training school’ (affiliated
4) Learning has to be measured through a demonstration of understanding
The extent to which this assumption was applied in practice was unclear and described in the 4th neoliberal assumption (above). In essence, this assumption was valued but not necessarily applied. In math education, for example, more of an effort could have been made in making student understanding explicit concepts as opposed to the use of workbook exercise and repetition. This research is not implying that Educator 1’s learners did not understand their work, rather, that more of an effort could have been made to highlight this and make it apparent to the learners themselves. Learners seemed to be aware of their learning through their Fridays’ review but these goals still centered on the accumulation of facts and less on the fundamental of understanding mathematical ideas. For example, students would claim that they were able to multiply decimals numbers but not necessarily be able to explain the properties of the base-ten number system which requires a more foundational understanding.

5) Every individual learns at different rates; learning is non-sequential
This assumption was present in the SRL environment as evidenced by the special attention paid to learner differentiation and ensuring that learners were in their respective zones of proximal development. An example of this was the use of tests/assignments/tasks with varying difficulties; which would be administered to students based on a combination of student and teacher decisions.

6) Knowledge is created through relationships.
The assumption that knowledge is created through relationships was acknowledged and implemented through the heavy use of collaborative learning. Collaborative learning is a
situation that can be expected to occur but not necessarily guaranteed (Dillenbourg, 1999). As a result, a substantial amount of effort was made by the Educator 1 to facilitate and encourage collaboration. Despite the fact that competition was also used it did not appear to infringe on this aspect of relationships. Competition was used more to scaffold SRL and goal setting where as collaboration and relationships were used in a variety of other learning contexts.

7) Subject knowledge is less significant than cognitive and emotional development. There was substantial amount of evidence which indicated that educators put emotional development a head of subject knowledge. SRL provided some of this development as it allowed students to choose where they felt most comfortable, however, the focus of emotional development went beyond traditional SRL. One student in particular, appeared to have anger issues and other emotional troubles. The educator spent a substantial amount of time with this student; scaffolding their learning and holding one-on-one sessions to deal with varying issues. During instances of student emotional overload, this student was allowed to leave the ‘subject knowledge’ context and return to it when personally and emotionally ready. Additionally, the whole school focused on this notion of emotional betterment and promoted a strong school culture as shown by the weekly school assemblies. Every week the whole school would gather in the gym/auditorium to be part of an event hosted by one of the classes. Students and staff appeared to enjoy this as it fostered community within the school and helped alleviate some of the pressures associated with daily school life.

8) Profound learning requires intrinsic motivation and collaborative approaches. The extent to which collaborative approaches are used has already been made clear. However the extent to which intrinsic motivation was used is more difficult to ascertain. Ultimately, the main goal for Educator 1 was to foster agency and a passion for learning through SRL. Jordon stated
that a good SRL learner was one who was enthusiastic for the hard work ahead of them because
the learner knew that they would be rewarded with their respective effort. However, as can be
imagined, this aspect of delayed gratification has varying success with primary aged pupils. In an
attempt to reach all learners the educator resorted to extrinsic motivation.

9) Learning takes place outside the school
This assumption was heavily enforced with the SRL environment as student learning was readily
encouraged to expand the confines of the classroom.

10) Every individual has a unique permutation of learning styles
SRL had been identified within the programme as the de facto learning style for all learners; but
as previously mentioned there was a heavy emphasis on differentiating learner needs. A few of
the educators used the word ‘love’ to describe a necessary quality an educator must have in order
to fully understand and meet the learners’ varying needs.

11) When learning takes place must be decided by the learner
This assumption was inherent within the SRL environment (as much as practically possible)
through the promotion of student choice. Naturally, students were required to be on task during
defined settings but students had the power to organize themselves and their work according to
their needs.

12) Full engagement in the community is the best preparation for adult life.
The researcher was not able to assess this assumption. Observations were limited to class time
and as a result extra-curricular and other community based events were not observed.

12.3 Summary of Assumptions and Extent of Transformative Education
The above list provides a descriptive set of two varying underpinning assumptions within the
SRL environment: neoliberal and transformative. Within the neoliberal framework, four out of
the ten assumptions (2, 4, 6, and 10*) were noted. Within the transformative framework, all of the twelve assumptions were observed at varying levels (1, 2, 3, 5, 6*, 7, 8*, 9, 10, 11, and 12). This description provides, superficially, an overall outlook of the programme. However, to stop here and conclude that the school is transformative would be premature. In order to see the full extent of the relationship between SRL and its transformative applications within this context an analysis is needed to combine the observed data, interviews, and general assumptions together to form a clearer picture. The results of the individual educators are presented below.

13 Results

13.1 Summary of Educator#1 (aka Jordan)

Jordon was the main focus of the research and was the only one to have been observed for the entire eight weeks. This educator self-identifies as SRL practitioner and has a strong understanding of SRL theory, as is apparent through the extensive discussions with the researcher. This teacher heavily used SRL and technology in the classroom and additionally complemented this with the use of collaborative learning tasks and gamification. Additionally, Jordon also self-identified with a strong critical pedagogy background, but the researcher had reservations on extent to which this was applied. Overall, the interview was a positive experience for both the researcher and Jordan as a good dialogue was initiated. Further details are described below.

13.1.1 Description of daily classroom life.

Jordon’s class had recognizable schedule, which students appeared to be familiar and comfortable with. The students sit in groups, which changed every eight weeks. This is done to

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*indicates partial partially applicable to the SRL School context.
encourage the children to acquire the ability of working with everyone in the classroom.

Additionally, there is a weekly SRL routine. Every Monday, students sit on the carpet in a semi-circle where the educator reads a weekly letter to the class. This practice mirrors the well-known ‘Daily Letter’ routine which has been shown to set a “positive tone” and a foster respectful school environment (Horsch, Chen, Wagner, p.368, 2002). However, this letter is also used in order to promote SRL. At this time, one of the activities introduces the curriculum contents to be covered for the week. Based on this, the students then proceed to write their learning goals on their assigned iPads and post them to the Google Classroom Environment. On Friday, students then assess their own goals and that of their fellow classmates. This is designed to not only provide an evaluation of students’ own goals but to also provide develop positive / constructive feedback skills. The educator evaluates and provides feedback to students’ goals.

Some examples include:

Student 1: I'm going to talk more English with Dylan [Researcher], and teach him Finnish words. I'm going to read my “desk book” for 50 pages. I'm going to practice math by Friday.

Student 2: Good [Student 1’s name]! you managed to speak with Dylan in English, and you've managed to read more than 50 pages.

Educator: Well done [student 1’s name] for this week! What do you think of the math work?

Or:

Student A: I'm going to learn the multiplication of decimal places. I'm going to read Harry Potter and the Half-Blood Prince end of the book by Sunday. I'm going to know China's two rivers, highlands, and the three largest cities by Friday.

Student A: I learned to share and tell the decimal numbers from the invoice. I have read Harry Potter and the Half-Blood Prince book almost to the end, so I can get it by Sunday read. I have learned about two rivers in China, highlands and three biggest countries and the desert. I managed to reach my goals.

Student B: Real good goals and you managed them well!
Student A: I also learned to define the word of classes and convert verbs tense and person forms.

An extensive analysis of the extent to which students are self-regulated based on their goal setting is beyond the scope of this research; however, the above examples do give a representative sample of students’ work and give insight to the SRL process used. Although not all students were at the same goal setting level (this was something that the educator sought to improve); most students appeared to set mastery goals (e.g. Learning something new, working hard) as opposed to performance goals (e.g. getting high grades or doing better than others). This is consistent with the educational research, which suggests learning goals provide better learning outcomes (Ames and Archer, 1988).

Students in this class have been developing this skill for the last two years. This process is summarized by the visual aids that are displayed at the front of the class (see Appendix 5). They indicate that a good goal is: 1) measurable, 2) is made within a time table, 3) is possible to accomplish, 4) challenges my learning and 5) is in line with the goals of our class. This aid is designed to encourage purposeful goal setting that lead to academic achievement. Students sometimes also choose to set social goals (e.g. being particularly nice to a classmate or doing well in an extra-curricular activity) and these are also acceptable objectives. However, the emphasis of the goals is governed by the selected curriculum content of the week and students were required to incorporate the material into their goals.

As students are working toward their goals the importance of these, student-chosen goals are emphasized. As much as possible, students are given the choice of how and when to do their work. At specific times it was required to work collaboratively or individually but most of the time it was left for the individual student to decide. They could choose to work: within the confines of the classroom or outside the classroom; in a private ‘cubby hole’ environment or
alternatively on a beanbag chair with their peers; on an iPad or on paper; to present their visually or in paragraph form. In summary, students were given a multitude of choices and students took advantage of this as different students chose different options based on their own preferences.

Another running theme used throughout the classroom was the application of *gamification*. This process was identified early in my observations and as the educator stated:

> The biggest challenge for me is to motivate my students to find their interests. Most of them do well with creating their goals but 25% of them struggle and I need to focus on them. I use a lot of gamification and give out points and stickers to motivate them. If I could get them motivated as much as they are into hockey than I would be a great educator.

In this class, the gamification was done by having a digital spreadsheet with certain requirements where students could self-assign points based on task completion. Periodically the educator would check to confirm completion, but students would generally not try to mislead or misappropriate the points. Students appeared to enjoy this method and the educator felt it scaffolded the SRL of the learners. An example of this is provided below.

13.1.2 The place for critical pedagogy.

During one of the many observations, a particular lesson underlined potentially problematic content from a critical pedagogy and multicultural perspective. This lesson was designed as an introductory lesson to China in a geography class. A YouTube clip was first used to introduce the lesson ([http://youtu.be/jekOMQwmHN8](http://youtu.be/jekOMQwmHN8)). It was in Chinese and appeared to be a love song,

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12 [1] The use of problematic chocolate box by the school occurred after Educator#1’s interview. However, the educator was consequently asked about the opinion of the label. Educator#1 was not concerned about the label of the box and did not think students would interpret racial prejudices from it. This was taken into account but not fully deconstructed by the researcher as the observed critical pedagogy intervention was more descriptive and relevant to Educator#1 beliefs and practices.
which portrayed a Chinese man and woman wooing each other each in stereotypical Chinese
atire (e.g. Cheongsam, conical hats, etc.) in traditional Chinese scenery (bamboo forests, river
boats, blossoming plum trees, etc.) This ice breaker was accompanied by a traditional Chinese
Poem (Hanshan). After which, a ‘gamified’ lesson was given to the class, it included:

1. Read carefully the textbook chapter about China (10 p.)
2. Make a Keynote slide about the topic, which the teacher to gave you. Give a title for the
   presentation. (5 p.)
3. Press the distribution button and select "open in another program" and then click "slides"
   (5 p.)
4. Find information on the topic (10 p.) Take advantage of the videos below and books,
   which are in the classroom.
5. Write the information, which you consider important, in your own words, and with a
   good Finnish language into the slide. (10 pts.) Find the image associated with the topic.
   (10 p.)
6. You can make a second China slide on the subject, which you would most like to receive
   additional information (20 and 30 p.)
7. Download your work below and send it! (5 points)
8. Change iPad with your peer in the group, read and give feedback on each other's work.
   (10 p. / Friend for feedback)

You can get up to 115 points of this work. How many did you get?

The purpose of this lesson was for the students to explore China whilst also promoting
SRL as well as collaborative learning. The students had four research classes, to complete this
task and were required to: First, individually, gather information and make a slide, and secondly,
combine their slides with their peers to make a complete presentation. Additionally, there was a
multicurricular focus where other subjects were given the focus of ‘Asian Studies’. In art, for
example, children were required to replicate Japanese calligraphy.

In summary, the extent to which the children succeeded in their task was not fully
measured due to language barriers. However, children did complete the task and appeared to
enjoy the activities, as measured through observations and students’ online goal posts. The
educator had some criticisms of the lesson mechanics (principally the use of Keynote and its
slide sharing limitations) but ultimately thought the lesson went fairly well.

This researcher believes that there were some more issues for concern, not so much in the mechanics of the lesson, but how multiculturalism was being covered. During the classes children were discreetly stretching their eyes and giggling and a couple of children were heard saying that ‘Chinese people are all the same.’ These behaviours were left unaddressed: by not pointing out that not only are Chinese not all the same, but the merger of Chinese culture with the larger Asian culture further, the teacher subconsciously, is contributing to the legitimacy of this mistaken belief.

A Chinese citizen (a colleague of the researcher) was invited to the class to answer any questions the children might have about China and daily Chinese life. The intention here was obviously not have one person represent all of China rather to: a) give a first-person perspective and expert accounts on much needed gaps in knowledge about modern China and b) break down existing racial stereotypes by having honest dialogue. During this Q&A session the children were shy, half of the children appeared engaged, and the questions were limited to surface topics while deeper topics were not tackled. For example, children had previously commented that they wanted to know whether it was true that Chinese people eat dog, but this question was not asked. Instead, questions were centered on local weather and plant/fauna. One question, however, that did come out naturally was on the topic of clothing; the children asked if Chinese people normally wear Cheongsams and it was pointed out that this attire is used only for formal occasions (e.g. Weddings) and is not used on a daily basis. The discussion had been going on for about 30min and the researcher used this opportunity to guide the dialogue to more complex subject matters. Topics probed by the researcher included, “Do Chinese people eat dog?; Do you think all Asian people look the same?; and, would you be offended if you witnessed people
stretches their eyes and giggling?’ When these questions were asked students who had shown signs of disengagement (e.g. Slouching and lack of eye contact) appeared to become engaged (e.g. Straightened posture, sat on edge of seat and maintained eye contact.) The extent to which true dialogue took place is unclear, but it was never intended, nor realistically possible to foster deep and meaningful dialogue in one lesson. ‘Courageous Conversations’ (Singleton, 2014) are a way of promoting equity in the classroom, but they take practice and hard work. The purpose of this idea was to introduce this tradition and to put a human face on a topic that was removed from the children’s reality. This research is not indicating that this had a causal effect but it should be noted that acts of stretching eyes were not observed after that lesson. Although, Educator#1 did not find the original lesson particularly problematic, Jordan was grateful for having my colleague participate in the class discussion and thanked us for the lesson activity.

The data collected and discussed is used to analyse to which extent it is relevant to transformative aspects of SRL in Finnish contexts, and will be discussed in the analysis of the results (below). However, before these ideas can be synthesized a summary of the remaining five educators is necessary to gather a more representative description of the SRL School context.

13.2 Summary of Educator#2 (aka Drew)

During the interview, Drew self-identified as having a strong understanding and value for SRL, but a weak appreciation for critical pedagogy. However, the extent to which SRL was being applied in the classroom was not convincing, due to allusions which surfaced during the interview dialogue. During this process two key issues on the relationship of SRL and critical pedagogy in this context surfaced: i) SRL and its focus on choice, and ii) the role of politics in
the classroom.

Although this educator strongly valued SRL, Drew admitted to being critical of allowing children decide things for themselves. This is indicative of the educator’s self-identified role as an ‘adult role model’ for learners and not their friend. This is representative of research on Finnish educators who tend to keep a certain professional distance from their pupils and identifying themselves as adult models (Simola, 2002). This research is not suggesting, that educators should assume a friendship role with their pupils, nor that this educator favoured a totalitarian learning environment. Rather, it suggests that a stern, adult like role in the classroom is further removed from the types of relationships that tend to support active student decision making favoured in SRL. Consequently, Educator#2 was critical of allowing children to choose educative outcomes by themselves and preferred to actively guide the decision and focus on what was felt the learners needed. When the educator was first asked about the focus on 21st CC the question was initially misinterpreted as addressing SRL’s promotion of choice; in which the Drew voiced scepticism because these skills take “years to develop, and we [as educators] have to learn it too and we do not know enough about it [to apply them]”.

This sentiment translated to a hesitance of the use of technology. It was felt that even though children often favoured technology, this teacher refrained from its use and preferred to work on other skills. Educator#2 distinguished SRL from its technological uses. More specifically, because other educators were heavily using Ipads with Educator#2’s students, in other courses, Drew felt compelled to limit the option of technology use in order to provide a variety of experiences. In other words, an explicit effort was made to distinguish technology use and SRL use.

SRL was used in forms of self-evaluation techniques because it (self-evaluation) was
considered a valuable skill to learn. This teacher had the learners evaluate their own work based on three levels; “ok, good, or excellent’. Students would honestly appraise their work with these levels and adjust their future classwork accordingly. Although, Educator 2 stated that this technique had more success in previous years and that they were currently working to bring this year’s learners to task.

The second interesting point worth highlighting from the discussion is in relation to critical pedagogy’s focus on political issues. When asked if SRL or subject content is value laden this educator responded that it was value neutral and it needed to be. In order to deconstruct this answer further, a concrete example of critical pedagogy use was provided. This example, Abrahams (2005), was on critical pedagogy music education due to the educators’ musical background. When it was stated; simply put, that “Musical education is political” this was outright rejected by Drew. The educator reasoned that music education could be political but that it shouldn’t be and that she is cognizant of teaching morals and she what is “right and wrong” based on the rejection of violence:

…I am very interested in this, when children ask what is right and wrong, who is right and wrong, I try and teach them that everyone has reason to act, but if you use violence or if you hurt somebody with words it is wrong, no matter what culture. It is the most basic truth.

Interestingly, they go on to cite the United Nations and its commitment to the prosperity of human rights and equity and claim this to be apolitical. Instead, this is viewed as a neutral process essential for promoting equity in the classroom as opposed to critical pedagogy ideals, which were rejected because they were heavily centered on politics.

In conclusion, Educator#2 provided insight to interesting aspects of the relationship between SRL, critical pedagogy, and Finnish culture by identifying certain reservations on
interpretations of choice and the role of politics in the classroom.

13.3 Summary of Educator#3 (aka Jamie)

This educator was the principal of the school and self-identified both critical pedagogy and SRL as being crucial to their contexts. Additionally, as Principal, Jamie was not limited to the realities associated with teaching practice and had an alternative perspective with more theoretical insights. This removed perspective complimented the other five teaching perspectives and was useful in highlighting the relationship between SRL and critical pedagogy in two significant ways.

The first is related to the participant’s educational background; this principal had studied Deweyan education extensively and was / is an expert on the topic. This outlook is particularly important here because Dewey’s view of education was used in this investigation as measure for the extent to which SRL can be applied transformatively. As expected, the participant’s idea of education was based on Deweyan social-constructivism, incorporated aspects of critical pedagogy extensively and ultimately was focused on fostering: collaboration, experience, dialogue, democracy, and sufficient space to allow for student growth. From this framework SRL was viewed as a way of thinking about thinking and not antithetical to this transformative education. A parallel was drawn between Dewey’s emphasis on critical thinking, between critical pedagogy’s focus on reflection, and between SRL’s self-reflection. However, one key distinction was made and this stems from the participant’s second unique insight.

This second standpoint stems from the participant’s title. As the principal of the school a different level of perspective is provided, one that is not confined to the SRL programme exclusively but also takes into consideration the school in which the programme is situated. As
the principal, the participant had particular insight to the research traditions of SRL and in particular those that created the SRL initiative at the school. Jamie pointed out that SRL research is not mutually exclusive to transformative education but there is clear critical element missing in the research:

In SRL we are thinking about thinking and we are thinking about learning as much as is possible in the language we have. There is some resemblance between critical thinking and self-regulation; it can be interpreted as one moment or way of working with critical thinking. But when we go to the research and the tradition of SRL this viewpoint is not there, this is my opinion and what I have noticed. The language they [the researchers] are using does not consist of the ideas of critical pedagogy or pedagogical action or democracy. They are speaking about learning and what is meaningful learning and how people understand this, but the deeper level, dealing with society and school role within that society and the world; this is not in the vocabulary of the research.

This statement echoes McCaslin’s warning of how SRL can be interpreted, Vassallo’s harsh criticisms, and further argues the need for critical research from within the theory.

The principal goes on to explain that the SRL programme is a pilot project which got approved for financing from by the EU. The goal of this project is to explore how to develop students’ capabilities to self-regulate their own learning in one cell and then to disseminate it to the rest of the school. This is the phase the project is currently in; reviewing the results and investigating ways in which it can be expanded to the rest of the school. They further elaborate that this does not mean that there is a large qualitative difference between the SRL initiative and the rest of the school. Rather the difference is more quantitative in that the rest of the school also meets the needs of the students by encouraging independence but in this programme it’s done in a more systematic way, in a deeper level, with heavy use of technology. In summarizing the school culture the principal concludes:

The main point everywhere is the child and what we think is best for the child. As educators, we have to get in mind that this is the heart of our work so that
everybody is thinking about the child; this Self-regulation is not enough in it of itself. I think this is something we more or less share within this school.

In other words, SRL theory may help in fostering transformative educative experiences but its use in the specific initiative is not qualitatively different from the rest of the school. Additionally, to rely exclusively on SRL would be short sighted; both critical traditions that question the practice and a love of learning are needed to continue on the path for growth.

13.4 Summary of Educator#4 (aka Morgan)

This educator self-identified with a low understanding and value to the specifics relating to both SRL theory and critical pedagogy. However, through the interview process themes relating to both came to the surface. Additionally, this participant provides a unique outlook as compared to the other participants because Morgan heavily relies on teaching philosophy to children. This theory is based on Philosophy for Kids (P4C) developed by Mathew Lippman (History of P4C, 2013).

More specifically, this educator is sympathetic to SRL discourse but not as explicitly as their colleagues. Morgan does not like to create artificial situations where students are forced to decide goals for themselves and required to think metacognitively on the spot. Rather, this educator does this pragmatically through philosophical discourse where students practice independent and communal thought by engaging in philosophical dilemmas. This rationale is reflective of the P4C tradition as can be seen by the following points from its official website:

- If educators want to teach ‘thinking skills’, then why start from scratch with a couple of days spent brainstorming a curriculum or buying a package from one of the many educational entrepreneurs? Why not start with a discipline, philosophy that has been developed over centuries and in which questioning and critical thinking are central concerns?
• Philosophers have developed tools of logic and argument that are necessary for critical thinking.
• Philosophy promotes questioning, open mindedness, clarity in language and precision in thinking.
• Philosophy can make the curriculum that many pupils experience as disconnected seem more coherent, and therefore meaningful. It provides a means to explore and link the conceptual foundations and assumptions of all subjects.
• Philosophy enables thinking about the relationships between facts and values; means and ends. It sets learning in the context of experience as a whole and against a horizon of questions that matter -- questions about central human concerns such as fairness, justice, truth, freedom, responsibility, right and wrong.
• Philosophy has developed the practice of dialogue as a method of inquiry that sharpens thinking and social skills, draws on diverse perspectives, and makes individual thinking accountable to a community of peers. (History of P4C, 2013)

The extent to which P4C incorporates SRL and critical pedagogy would be an interesting line of research, but is beyond the scope of this thesis. Rather it is interesting to note the interpretations of the SRL programme by this educator to incorporate critical thought vis-à-vis this method.

An example of this came about through dialogue generated through the interview. At this time the researcher presented a picture of the problematic brand of chocolate that was currently being used by the school for fundraising purposes. When presented with this familiar product the educator did not appear to have a problem with the packaging. However, when a series of questions regarding the racist implications of the box were made, the educator had this to say:

Ahhhh, now that I think about it...it is a problem. Now I open my eyes, in that I have never really thought about that before. I have read that they changed the names, I remember 10 years ago, and I don't like that picture at all...Perhaps I take that picture in my lesson on Monday and ask the children what is this picture? We need to talk about this, it is very common in Finland, everyone or nearly everyone would not want to see what that picture represents what it is but many people don't see it at all, they only see chocolate because we nearly only have Finnish people here if you compare it with your country. But I have to prove this; this is a very good idea now! I only thought about giving the candies to the kids because it was Valentine’s Day, I never thought about that picture before.
As the above quote demonstrates, the educator had taken the box for granted and had not considered the racial implications. As a result of this realization, the educator decided to use the P4C method and have a conversation with the children so that they could deconstruct the underlying meanings in the box themselves (this activity is similar to the previously mentioned critical pedagogy’s Courageous Conversations).

During this discussion, the researcher and the educators assumed passive roles and let the children be the active participants. The picture of the box was shown and the class was asked to brainstorm any possible questions they had about the box. After, a substantial list was generated the class would pick which questions they would want to discuss in an attempt to answer them. The complied list of questions can be seen in Appendix 6. As can be seen from the picture, the children first asked superficial questions about the colours of the box but quickly the issue of racism and symbolic representations were addressed. Because the discussion was in Finnish, this researcher had a limited understanding of the specific contents of dialogue. However, brief discussions were translated by a colleague and it was clear that the children were struggling with the idea of racism, what it was, and how to identify racist content. It was never the intention to create an epiphany within the class; rather, the goal was to see if specific critical pedagogical practices were to be deemed relevant to the context and if so to begin educative discourse in this tradition. This was accomplished here.

In conclusion, Educator#4 refrained from using specific SRL strategies in place of encouraging agency and critical thought through philosophical discourse. Even though this teacher was unfamiliar with the specifics of critical pedagogy and was hesitant of explicitly incorporating or addressing politics in the classroom; tenants of critical pedagogy described above were, nonetheless, incorporated through the focus on critical dialogue through philosophy.
13.5 Summary of Educator#5 (aka Tristan)

Tristan worked outside of the specified SRL initiative but still worked within the same school. This provided an interesting perspective: removed from the specific SRL rhetoric but still within its overall framework and application. This educator felt that both SRL and critical pedagogy were valuable for their learners. This interview yielded an interesting finding pertinent to the SRL/critical pedagogy relationship in that the educator did not see them as mutually exclusive, but rather complementary to teaching goals.

Unlike popular discourse and research previously cited, this educator does not view SRL as something particularly new that started in the 1980s. Tristan viewed SRL as a systematic method for facilitating student independence; which has been a goal for many educational institutions in the past and relied on their previous educational studies by Steiner and Montessori as evidence. This reasoning is highlighted by a 2013 open letter written to a newspaper by a vice-principal of a Montessori school, titled; ‘Self-regulated Learning Been Around for Years’ [sic]. In it they argue that:

Montessori education has always recognized children learn in different ways, and accommodates all learning styles. Students are also free to learn at their own pace, each advancing through the curriculum as they are ready, guided by the educator and an individualized learning plan… Montessori educators have been facilitating self-regulated learning for more than 70 years. It is neither antiquated nor a product of the 1970s (Self-regulated learning been around for years, 2013).

To clarify, educator#5 was not advocating for one particular teaching method (Montessori, or otherwise), rather used this as an example of a critical pedagogical style: to evaluate, use and borrow different techniques from a multitude of sources for ones’ teaching needs; which, in this case, SRL was the desired goal.

Due to this critical multidisciplinary approach this educator is able to incorporate aspects of SRL that are valued and refrain from aspects which are not. More specifically, they engaged in widespread use of student choice and self-evaluations as a way of scaffolding and
differentiating independence through autonomous learning (both at an individual and group level). At the same time, they also refrain from over relying on the technological aspect of SRL. Tristan viewed technology as something that is already ubiquitous in their learners’ young lives and as a result chooses to focus on developing other strengths (e.g. Intrapersonal communication skills) than reinforcing technological dependence. In Tristan’s words:

In the past five years or so the majority of children spend more and more time on screens and less and less time face-to-face learning, listening to each other, and carrying on their dialogue. It has become a skill that needs to be taught and continuously practiced… I hold back from the technology aspect but not from SRL learning per se... We spend an awful lot of time discussing learning strategies: Who are SRL learners?; How do you learn best?; What is the easiest for you?; What is the most challenging thing for you?; How would you make that challenge is something achievable and you can feel good about it? I feel like I am really trying to lay the groundwork for every one of them, so that we can really navigate their own systems of learning processes… so I can again give the child ownership of it.

In conclusion, this educator does not view SRL as a particular doctrine that needs to be applied in order to foster achievement. Instead, SRL is viewed, critically, - as one of many other methods available to facilitate learning and accommodate learners’ needs.

13.6 Summary of Educator#6 (aka Pat)

This educator was both outside the SRL environment and outside the school. Pat has extensive knowledge of both SRL and critical research literature and identified both as vital to their contexts. This participant was selected for their strong these theoretical backgrounds and experiences in both inside and outside Finnish contexts. Key insights from this interview highlight SRL’s theoretical constructs and its application to the local cultural context.

This educator found SRL a useful theory for educational contexts not only because it is student centered but also because it forces educators to facilitate the proper environment
(conceptual or physical) conducive to creating learning scenarios. This view of SRL is well rounded and general however not anchored to the specific details in the literature. The participant is well-read in the subject matter and cited key researchers during our discussions but found the findings to be too specific and not immediately relevant. Rather, the essence of SRL was found in how it relates to critical pedagogy in that both SRL and critical pedagogy encourage reflection. In Pat’s words:

> When I read Zimmerman, Pintrich, or Winne, not much sticks with me, other than the sense that you are wanting people to self-reflect. And I actually like this parallel between the critical pedagogy literature and SRL. You are actually teaching people to reflect. Not only about their own practice but other people as well. If I’m understanding that kind of cycle; one of them is plan, then you act, then you assess and then you do it again. It is a fairly generic thing that other people talk about too in all manner of fields. But it’s this idea of taking the time to reflect on what you have done to then support your future action. I truly believe that there is a lot of that inherent in the critical pedagogy because it is also a lot about this and becoming self-aware. They [critical pedagogues] may talk more about things like epistemology but you are still trying something and then you are reflecting on your role, your actions your power, all those things. In general, it’s a pretty similar type of circle.

In other words, SRL’s ideas of metacognitive reflection are not mutually exclusive to critical pedagogy’s reflection; instead, the challenge is what content is being reflected on. Critical pedagogy focuses heavily on inequalities, on power dynamics while SRL generally attempts to remain ‘neutral’ and focuses on wide-ranging task completion.

In this vein, the discussion between the researcher and Educator#6 suggested that SRL is not necessarily limited to one particular culture or context because it is adaptable and can be modified to fit the needs of its learners. Certain social contexts may be more easily fitted to SRL methodologies based on certain practices, customs, or values, than others; but this does not exclude SRL from any one particular environment. To clarify, this is not to say that SRL is neutral; much in the same way the scientific method is not neutral (see; Kuhn, 1977; 2012).
Rather, SRL is a tool with its own set of unique strengths and weaknesses and must be assessed accordingly when used. As the participant explains,

SRL is a process that is very much rooted in a very epidemiological way of thinking about the world. It actually depends heavily on how you define/interpret it, which then influences the roles the learners’ assume, which in turn has a huge impact on how far you are going to get on being transformative.

The participant further explains this by providing an example. Within the OECD (2012), there are large funding initiatives at promoting Science, Technology, Engineering, and Math (STEM). These efforts align nicely with 21st CC and the larger neoliberal agenda of generating human capital through the advancement of marketable skills. In other words, from this OECD view, education is about creating jobs and expanding countries’ economies: SRL can be easily adapted to these goals and ideologies. In this way, SRL assumes a behaviourist way of learning and functions with learners taking on passive and achievement based roles. Educator#6 argues, that a more transformative approach to SRL would focus on STEAM which includes the previous areas of studies but also adds an ‘A’ for Art (Piro, 2010). This innocuous addition improves the transformative functions drastically as it infuses the abstract, creative, and critical thinking aspects of art with the more structured thinking of the science educations. This whole heartedly applies to critical pedagogy views by deconstructing barriers and false dualisms by combining both qualitative (art) and quantitative (maths) curriculum contents.

In conclusion, this participant considered SRL a valuable resource for encouraging critical thought and dialogue with learners. However, this was not used as a standalone feature; rather, its transformative success was heavily dependent on the roles the learners were asked to assume based on critical pedagogical interpretations.

13.7 Results Summary
There was some variation in the views between SRL and critical pedagogy amongst the
educators but certain findings should be noted. Educator 1 (Jordon), worked within the SRL
environment, used SRL but did not have a strong grasp of critical pedagogy. Educator 2 (Drew),
worked in the SRL environment, but did not have a strong grasp of either SRL or critical
pedagogy. Educator 3 (Jamie), worked in the school but did not work within the specific SRL
environment, but had strong theoretical conceptions of both SRL and critical pedagogy. Educator
4 (Morgan), worked within the SRL environment, and did not have a strong grasp of either SRL
or critical pedagogy. Educator 5 (Tristan), worked in the school but did not work within the
specific SRL environment and had a strong grasp of both SRL and critical pedagogy. Lastly,
Educator 6 (Pat), worked outside the school (and the SRL environment) and had a strong grasp
of both SRL and critical pedagogy. A breakdown of these interview results can be found on
Table 3 (next page).
### Table 2 Interview Summary

<table>
<thead>
<tr>
<th>Type of Questions</th>
<th>Summary of Questions</th>
<th>Educator#1 (Jordon)</th>
<th>Educator#2 (Drew)</th>
<th>Educator#3 (Jamie)</th>
<th>Educator#4 (Morgan)</th>
<th>Educator#5 (Tristan)</th>
<th>Educator#6 (Pat)</th>
<th>Summary of Educator answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert scale (1-10) on value of SRL</td>
<td></td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>M=7.5 SD=8.8</td>
</tr>
<tr>
<td>Likert scale (1-10) on value of Critical Pedagogy</td>
<td></td>
<td>8</td>
<td>2</td>
<td>9</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>M=6.8 SD=3.8</td>
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<tr>
<td>Your role as an educator?</td>
<td>I have many roles. But most important is to act as a motivator and a guide or facilitator.</td>
<td>An adult but also a guide governed by love with limits.</td>
<td>To support the students to learn and to grow and take care of the school climate and school feeling/ atmosphere.</td>
<td>My role is not too get the right answers also, my role is a guide that conversation; I need to be a wise and critical adult and listen to children's ideas and try to find what they are thinking and develop those ideas so we could think more about that and perhaps together we can find out more.</td>
<td>The most important thing is to guide and be an equal thinker.</td>
<td>A facilitator</td>
<td>All educators indicated that they were some form of guide.</td>
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<td>Roles of the learners?</td>
<td>Explorers and are responsible for their</td>
<td>They are not friends they are children and I</td>
<td>We together as teams so that ideas can be</td>
<td>Every day they have to learn something.</td>
<td>To think critically and ask critical</td>
<td>Problem solvers.</td>
<td>5/6 explicitly mentioned that their learners’</td>
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<td>Pedagogical strategies relied on most</td>
<td>Collaborative learning and holistic approach to subject matter</td>
<td>To work together and to get students to experience new things</td>
<td>Discussion and trust by giving space and allowing for growth</td>
<td>Philosophy for Kids (P4C)</td>
<td>Dialogue. Face to face dialogue, both individually and group dialogue</td>
<td>Problem based learning and project based learning.</td>
<td>3/6 educators explicitly referenced dialogue. The other three emphasize it implicitly through collaboration.</td>
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<td>Are SRL and other subjects neutral and value-free?</td>
<td>Neutral</td>
<td>Neutral, maybe it wasn’t so neutral when I was a kid but nowadays it is not very political and very equal in Finland.</td>
<td>Is there anything that is value free? Education is always value laden</td>
<td>Yes, nothing like that (politics) is related to this. I have my own political ideas but of course I have been getting rid of those and now I do not want bring this plot back in</td>
<td>There is no such thing as value free. Teaching is always political one way or another.</td>
<td>I disagree. I think no teaching is value free.</td>
<td>3/6 educators interviewed considered SRL to be value neutral.</td>
<td></td>
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<tr>
<td>Summary of longer interview questions designed to encourage dialogue (these questions were modified based on the direction of dialogue but all)</td>
<td>How does SRL help in your classroom?</td>
<td>It scaffolds their learning by breaking down their created learning goals. As a result, students can set their own goals and choose how and what</td>
<td>I use it to help the children evaluate and regulate their work. However, some subjects are easier to apply it than others.</td>
<td>It takes one’s own thinking as an object so that we are thinking about thinking and thinking about learning as much as possible.</td>
<td>I am interested in SRL but not in the same way as the other educators. I don’t like that we set down and all have to write down our goals</td>
<td>SRL is one of the key elements to encourage class dialogue. Learning to participate in a classroom discussion is something that every child has to find in</td>
<td>I think about the Zimmerman cycle; plan, act, assess, do again. But what I actually, like about and parallel between critical pedagogy and 2/6 Educators did not rely on SRL.</td>
<td></td>
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<td>content was covered).</td>
<td>aspects of the curriculum they want to learn.</td>
<td>themselves to participate; no one can tell you to keep raising your hand, one has to find the strength in one’s self.</td>
<td>SRL; You are actually teaching people to reflect. Not only about their own practice but other people as well.</td>
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<td>How do you know if a student has good SRL?</td>
<td>When they understand that after working hard they will have fun; that the “A-Ha!” feeling only happens after hard work and this is very valuable and worth the effort.</td>
<td>It takes a long time to develop this, I am currently struggling with this class because students are on very different levels. Currently I am trying to develop goal setting.</td>
<td>Being able to stay on task no matter who you are doing it with. There’s a certain set of skills that kids need to have for most activities before they have a choice in what they are doing, when they are doing it and who they are doing it with.</td>
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<tr>
<td>Thoughts on 21stCCs</td>
<td>These competencies are not only valuable for pupils’ lifelong learning but are also very useful for building SRL and their own learning needs. This is useful</td>
<td>Maybe, they focus too much on commercial/economic goals. We must take this into account but maybe it is not so strong here, in Finland, as it is in American</td>
<td>Many times these are taken for granted and as a result we have to look at these initiatives critically to determine what is best from the viewpoint of the child and</td>
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<td>Not familiar with the 21st CC goal specifically but I worry about any future learning strategies because they can act like blinders.</td>
<td>It seems to be very IT oriented and very economically driven.</td>
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<td>I am very sceptical here, that is code word for STEM, get more tech, we need to support our economic ground because we think that training more</td>
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<td>4/6 were critical of 21st CC focused goals.</td>
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<td>Does SRL address 21\textsuperscript{st} CC problem?</td>
<td>n/a</td>
<td>Yes, but we have to be neutral and show different sides of thinking to children; we cannot be any ambassadors of business world.</td>
<td>n/a</td>
<td>It can, it but there seems to be a gap in the research tradition of SRL that does little to address this.</td>
<td>It can, it comes back to knowing the students you teach well enough and whether they can use it as a tool.</td>
<td>It depends but I don’t really see that very much in the rhetoric.</td>
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<td>SRL’s over reliance on the individual</td>
<td>Maybe, but SRL has common aspects to when you have to collaborate and share responsibility. It is very important that the students learn that they have to share knowledge.</td>
<td>The basic idea of the school is to work together; it’s not working together if we all have our own paths or if everybody has something technological in front of them. So we must be careful with SRL; just because people are working at the same table doesn’t mean they are working together.</td>
<td>n/a</td>
<td>It depends on how the self-regulation is understood and practiced. For me learning implies social and communal purpose and this juxtaposes the ‘self’ word in the terminology.</td>
<td>Not really, it is important to guide learners as individuals but everything we do there is an aspect that we do it together.</td>
<td>There is the 'self' and then 'environment'; there is nothing in there social. I think the social is a huge aspect about what people can learn.</td>
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<tr>
<td>Value of social Justice as a student motivator in general</td>
<td>I haven’t really used discussion about what is “right and</td>
<td>It can be for some students, but not all students are able to think at</td>
<td>The idea of education is to change the world; school still is</td>
<td>It is s very welcome in my classroom but only if my children are</td>
<td>Yes.</td>
<td>Yes, it can be very valuable.</td>
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<td>3/6 were hesitant in using social justice issues for various contexts.</td>
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<td>Is this specific social justice classroom exercise valuable to your pupils?</td>
<td>Yes, maybe but I don’t really have any idea how to use it. They are indeed interesting for children but I do not have time to look for these type of resources.</td>
<td>No, we are not political, it can be but we do not handle it in this way in Finland. We have to communicate with society and surroundings but not politically. We have this basic idea of equality, e.g. the ideas promoted by the UN, and apply them</td>
<td>n/a</td>
<td>My first impression is I don't need these things in my classroom; I want to do my mathematics my mathematic s only with mathemat ics; we are a low level and this is a priority.</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Thoughts on criticisms of Finnish education</td>
<td>Yes, I agree and am very worried about this. The system is still very old fashioned; educators</td>
<td>Not sure, Finland has a really good basic education system in Finland and the problems described here</td>
<td>Yes, it is a valid critique.</td>
<td>Yes, yes, I agree.</td>
<td>I find them fair…but there also cultural factors involved.</td>
<td>Disagree; I question the OECD measures used for these findings and the lack of cultural</td>
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</table>

| 3/6 educators agreed, 1/6 was undecided, 2/6 disagreed | reasons. |
| Question                                                                 | Yes! It is a very good thing for differentiation and to scaffold their learning. | Yes, this project has been very good for motivation of school atmosphere. | I hope so, but only SRL is not enough; it also depend on the culture of the school so that we give students real experience and participation so they have real effect on their realities. | My method of using discussions on philosophy helps this. | Again, it can, but comes back to knowing the students and taking cultural factors into account. | n/a | 2/5 said SRL is good for helping this problem. |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------| n/a |                                                                       |
| What role does Critical Pedagogy have in Finnish contexts, is it relevant to your work? | n/a                                                                            | n/a                                                                    | n/a                                                                    | n/a                                                                    | I find it extremely important, in terms of curriculum content; especially for creating dialogue which has less of a tradition here in Finland | n/a | 3/6 educators were unsure of the role of critical pedagogy in their contexts. |
opposed to in Finland where you maybe need to work a little harder or if you work in those contexts you are sometimes extrapolating to non-Finnish contexts.

<p>| Does the specific critical pedagogy example help this problem? | Yes! We should use real problems but these sample problems (that we see on the news) are too hard and complex to translate for children. But the issues on the news | n/a | n/a | Maybe, it is similar to my philosophical methods just more concentrated on mathematics. | It can, but it depends on your actual students. I would not limit myself to just this one resource; but yes things like this can help foster discussion and critical thought. | n/a |
| Thoughts on problematic aspect in lesson is identified by researcher | Disagrees on problematic aspect. | Agrees on problematic aspect. | Agrees on problematic aspect. | Agrees on problematic aspect. | n/a | 4/5 agreed with the problematic lesson |
| Thoughts on a specific critical pedagogical intervention | It was very good idea, thank you for bringing your guest speaker. | Rather avoid the issue because the kids are too young unless it comes out explicitly in my classroom. | I have to think about that and get students to talk about that. Thinking critically we might carry these ideas | Yes, I do this through philosophy and discussing what is right and wrong. | Generate a dialogue to discuss it. | 4/5 of the educators felt dialogue was a good method for addressing the issue. |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is SRL valuable in other non-Finnish contexts? In more marginalized areas?</td>
<td>Yes, because we never fully know what is best for everyone SRL students can choose what is best for them. SRL gives the pupils more possibilities; the content is less important than what they are actually doing – how to learn to learn is what is most important and this is important for everyone. It could be. The most important thing is that we do not segregate or rank children and that children feel safe. To say it roughly, self-regulation is the invention of the middle class but I don’t see the connection of only using it in middle class contexts. n/a</td>
<td>I find it very important, before even considering SRL, to know your students well, individually. If, you don't know your kids there is huge potential that they could be completely drowned by such processes. It is very much dependant on cultural context, and certain contexts (for several factors) may be more conducive to SRL; but I do not think SRL is not applicable to any one particular context that I am aware of. 5/5 educators felt SRL could be used effectively in other social contexts</td>
</tr>
<tr>
<td>Final reflection on interview process</td>
<td>I liked it very much; as I have been working for many years it is important that I don’t become blind by my perspective. Thank you. I have a very clear way of teaching but I like discussion and am open to influences. It was very good and I am very grateful that you have taken this as your research topic because too often these issues are not discussed and this process is what we need. This interview was very interesting and I am very glad that I can tell you something new and that my goal with philosophy incorporates critical thinking and [problem] was a very BIG thing for me and this [this</td>
<td>Thanks, I appreciate your work and this kind of questioning. 6/6 educators were appreciative of the interview process and the research at hand</td>
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<td>Summary</td>
<td>Summary</td>
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<td>math lesson] was a very big thing for me.</td>
<td>Heavily believed in SRL and used technology to aid regulation. Was not familiar with critical pedagogical values but was open to them.</td>
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<tr>
<td>Hesitant of SRL, especially in relation to technology use. Was not familiar with critical pedagogy values and was reluctant to incorporate political issues in the classroom.</td>
<td>Deweyan view of education, relied on critical pedagogy values, and believed in SRL with critical interpretations.</td>
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<tr>
<td>Hesitant of SRL and a mild understanding of critical pedagogy; they heavily relied on philosophy to address critical thinking and questioning aspects and fostering discussion but lacked understanding of systemic political forces involved.</td>
<td>Used SRL as one of many tools available to meet their learners’ needs and was very well versed in critical pedagogical values.</td>
<td></td>
</tr>
<tr>
<td>Used SRL as one of many tools available to meet their learners’ needs and was very well versed in critical pedagogical values.</td>
<td>Jordan: +SRL - CritP</td>
<td></td>
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<tr>
<td>Morgan, Tristan and Pat: +SRL +CritP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drew: -SRL -CritP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamie: -SRL +/-CritP</td>
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Although, critical pedagogy was considered valuable for half the educators (3); these participants worked outside the SRL initiative; while the other half, who did not incorporate critical pedagogies explicitly were within the SRL programme. Furthermore, 67% of the educators (4 out of the 6) found SRL valuable for their teaching needs. Surprisingly, all of the participants (4 out of 4) who identified strong critical pedagogy backgrounds found SRL also helpful, but only a third of the SRL programme educators (1 of the 3) reported heavily relying on SRL. These findings will be analyzed further in the analysis section.

14 Analysis

In the commitment to critical pedagogy, the goal of this research has been twofold as it seeks to combine both theory and practice. The first goal was to theoretically evaluate SRL theory and deconstruct its neoliberal and/or transformative tendencies. The second goal was to incorporate praxis; to determine how this synthesis is relevant and applied to Finnish primary school contexts. Theory and practice have been separated here into two separate goals to highlight each component, but in reality these goals are interdependent and further work toward combatting false dualisms. In this thesis, the SRL teachers' experience and beliefs about the value of the critical nature of SRL are used to shape the critical theory and, in turn, the theory is used to evaluate the SRL practice. As a result, this analysis will begin first, with an explanation of teachers’ reservations towards critical pedagogy; secondly, an analysis of educators’ beliefs on the existing criticisms of SRL; and finally using these two findings to establish the transformative functions of the SRL environment.
14.1 Reluctance to Critical Pedagogy: An Explanation

As identified in the result section there was a variance in understanding critical pedagogy among the teachers interviewed. Three of the six interviewed teachers fully embraced critical pedagogy. However, to gain a better understanding of the application of transformative functions of SRL it is important to investigate the reasons teachers within the SRL framework did not explicitly incorporate critical pedagogies explicitly within their context.

A common theme was an unwillingness to engage in politics in the classroom. Not only did these teachers see their work as a-political but they viewed their practice as neutral and this neutrality was vital for equity. Interestingly, one of the teachers went so far as to claim that their neutrality mirrors UN values and went so far as to say that “I don’t think the United Nations is political”. Although, this seemingly is contradictory it is not an isolated line of reasoning; on the contrary it is one that is embedded in the Finnish social culture.

Simola (2005), to explain some of the socio-historical factors that have been overlooked in the discussion of Finnish Education’s success, notes that Finnish culture is complex due to its unique geographical location (among many other factors); a culture exists that has clear elements of Western culture as well as elements of Eastern authoritarian, obedient and collectivist mentalities. This element of Eastern tradition reinforces this idea that politics is something that should not be publicly discussed. To complicate matters further, it appears that a collective confusion exists between the definition and concept of ‘party-politics’ and capital ‘P’ politics. An illustrative example of this misconception comes directly from the Finnish Basic Education curriculum (2004) which is currently being taught until the new version replaces it in the fall of
2016. In this document, section 2.1 titled, ‘Underlying Values of Basic Education’ it states: “In basic education, instruction in the different subjects is nondenominational and *politically neutral* [emphasis added]” (p. 3). However, further down in the same section it also states that:

> The underlying values of basic education are human rights, equality, *democracy* [emphasis added], natural diversity, preservation of environmental viability, and the endorsement of multiculturalism. Basic education promotes responsibility, a sense of community, and respect for the rights and freedoms of the individual.

This contradiction between, teaching equity and democratic values while remaining political neutral, is an inconsistency that results in a contradiction that trickles down to the educator level as evidenced by the findings of the interview. It is important to note, that this researcher is not implying that the authors of the Basic Curriculum do not understand or are confused about the term ‘political’. Instead, this confusion is emblematic of socio-historic forces that impede one from talking about sensitive or controversial topics in public. This has widespread cultural effects, as noted by a recent survey (Haavisto, p. 58-59, 2014), which shows how the general Finnish population is wary of political discourse and refrain from activism. As a result, it is not surprising that a sudden introduction of upfront and poignant political ideologies stemming from critical pedagogy would be unnatural and initially resisted in a Finnish classroom; as was the case here. To be clear, this does not suggest that teachers were unable to produce critical thinking within their discourse, in fact they were. Rather, this critical practice was limited to micro-contexts and was not applied to the wider, macro-issues, which have an equally central role in the educative process.

> These findings are reflective of previously cited research (Svendsen, 2014; Tomperi, 2008a) which also highlighted the lack of critical elements within the Finnish Education system.
In a previous section of this thesis, *Application of Critical pedagogy: Transformative Education* it was mentioned that teachers in Finland do not use their “remarkable freedom”, feel restricted in their practice and that this SRL school should be an exception to this because of its focus on agency. It is true that the teachers here had a vast amount of freedom in their practice, as evidenced by their unique interpretations and practice of SRL: none of the teachers interviewed taught in the same way despite having the same curriculum and SRL focus. However, a restriction did exist in the form of a lack of awareness and understandings to the influences of political discourse within the classroom practice. This restricts and limits educative functions within a certain narrative. It is not that transformative functions cannot exist; but creating these perquisite environments to address and resist problematic assumptions that stem from dominant political/culture are increasingly unlikely as their awareness does not exist in the first place. This unawareness translates to the, previously identified, existing contradiction where Finnish educator freedom is not used because there is no apparent need to diversify practice to address such issues to begin with. Examples of two underlining uncritical applications are described SRL below.

14.2 Effects of Uncritical SRL

As previously established an uncritical interpretation of SRL can be problematic by not addressing underlying socio-political issues within the classroom (E.g. The “Asian Studies” and ‘Chocolate Box’ cases). However, uncritical viewpoints can also affect SRL discourse independent of macro-level factors. Examples of this can be found in the way SRL is applied and
its unquestioned relationship with technology.

The application of SRL was fully endorsed by the observed educator (Jordan). Naturally, however, Jordan noted that different students had varied experiences with SRL: they noted that some learners struggled more than others in their regulation abilities. To address this they used Gamification to scaffold and make SRL more accessible.

Gamification is relatively new trend in education and as a result consensus on its definition is not fully achieved; however popular papers on the topic define it generally as “as the use of game design elements in non-game contexts” (Deterding, Dixon, Khaled & Nacke, 2011 p.9,) or as “a form of participatory, or interactive, entertainment” (Rollings, and Adams,p.34 2003). This was not the type of methods observed in this SRL environment. Although, the term ‘gamification’ was used by Jordon, this researcher believes this is a misattribution mistake. Gamification has more to do with the active use of virtual spaces (e.g. Video games) in non-video game contexts and less to do with the allocation of points. As de Byl (2012) explains, even though both heavily use rewards the system of gamification is more than modern application of a token economy: the former, is more intricate and can use the creation of meta-world in which students have avatars; whereas the latter is individual and behaviouristic process used to help manage behaviour. This latter, token economy, model was the method observed to scaffold SRL. Despite the vast and well-established research has warned educators on the heavy use of individualist competition and extrinsic rewards (Deci, Koestner and Ryan, 1999), the educator spoke highly of the system as a good motivator to aid in self-regulated goal setting.

It should be prefaced that this case differed from traditional token economies in two ways.
First, the reward was never something of real monetary value; rewards were given through points which eventually culminated to a sticker or praise. Secondly, this system differed from traditional token economies in the way rewards were administered. Unlike most token economies where the rewards are only administered by the person in charge, here an additional SRL initiative was taken by allowing students to administer the points themselves. Observing this, students appeared to enjoy this process and this lead to the initial lure of the method itself. The extent to which these two modifications ameliorated the effects of token economy is unclear however; the case remained that students were eager to collect their individual points.

This research is not formally endorsing nor condemning the above practice. The extent to which gamification actually scaffolded SRL and the extent to which this lead to achievement was not measured. Rather, the illustrative point here is that a method (extrinsic rewards) that is largely rejected by educational psychologists for promoting achievement (Deci et al., 1999) is being used to scaffold a quality (SRL) favoured by educational psychology in promoting achievement. Critical pedagogy is adamantly opposed to such behaviourist and mechanical conceptions of learning. Thus, it is argued that the same absence of critical theory which contributed to problematic cultural conceptions also contributed to the reliance of methods to support SRL that are unfavourable. It is not so much that this individualistic/competitive use of token economy is destructive to educational values rather that a more familiar understanding with critical pedagogy discourse would discourage such methods and use a pedagogy which catered to learners intrinsic needs and one less focused on individualized collection of rewards.

The second practical example of uncritical SRL centres on SRL’s seemingly intertwined
within the educational theoretical research there appears to be an increasing focus on both: scaffolding SRL through technology and increasing proficiency in technology through SRL (McLoughlin, & Lee, 2010). Although this may well be the case, there needs to be nuanced pedagogical approach as opposed to a de facto pairing of the two. However, this pairing appeared to be the case in the observed SRL School. The SRL initiative was first introduced alongside systemic use of Ipads and other Web 2.0 technologies. This relationship was made clear by three teachers (Drew, Morgan, and Tristan). These educators all shared concern for the unintended consequences of technology’s sudden ubiquitous role in the classroom. In essence, they believed that technology already has an emphasized role outside of school and if the school mirrors this too extensively it also risks mirroring the drawbacks associated with heavy tech use. As a result, the school should not ignore technology’s role but should also emphasize alternatives to complement its focus. Tristan summed this sentiment nicely:

> It all comes back to knowing the students you teach...some are able to use the Ipad as a tool; to actually use it to whatever they are working with whereas for others, it becomes the purpose and the content. To be able to separate those children in a way that you are able to guide everyone to use it as tool that helps you and guide you instead of it being the sole purpose of that is why school is fun. To actually see the thinking together as the driving force

> In other words, Tristan is not anti-technology; but rather against it being used uncritically and it being the reason to entertain kids in school. Tristan goes on to admit, “...I couldn’t [navigate this separation], and that’s why I am holding back with my [students] to give them and us the time to critically think and to stop and think about thinking; I am holding back from the technology aspect but not the SRL per se...”
This distinction was made based on what was felt was best for the students. However, it should be noted that Tristan had quite a strong background in critical pedagogy. This distinction between technology and SRL was not so easily made by educators with less familiarity to critical pedagogy. Drew, for example, was hesitant on using SRL but when asked about the reasons behind this reluctance, no direct criticism of SRL was given. Instead criticisms of technology use were provided. This teacher claimed that, “The basic idea of school is to work together and it is not working together if [students] all have their own iPad.” The extent to which this critique is accurate is not pertinent here; instead it is the fact that an overreliance of individual iPad use is being confused with SRL.

Undoubtedly, technology is double-edged and can be used to connect people across the world but can also isolate us in technological bubbles. This particular debate is not being engaged here. Rather, it is important to highlight that SRL and technology appear to be infused and this infusion caused concern with the educators. This concern of this relationship is warranted because it is not occurring in a vacuum. Indeed, this relationship is emblematic of Vassallo’s neoliberal concerns of SRL as it is coupled with the programme’s focus on 21st CC. In other words, the foundation and financing of such a programme mirrors the recent OECD trends in economic initiatives which tend to increasingly fund programmes with strict technological requirements. This is problematic for critical discourse because these policies, like the European Institute of Innovation and Technology (EIT), increasingly push for more ‘more performance-focused funding’ (Maassen and Stensaker, 2011); which could be argued to result in a transformation of educational institutions from being a social institution to an industry enterprise
In summary, an uncritical interpretation of SRL could quickly lead to neoliberal tendencies by allowing token based scaffolds that favour rewards over intrinsic learning and unquestioned use of market based applications (Ipads) in the classroom. That being said, it is premature to label SRL as inhabiting neoliberal tendencies to this context before analyzing what the educators’ beliefs are on these matters. Below a breakdown of Vassallo’s three critiques will be deconstructed with input from the educators. This input will provide platform to judge the extent to which this critiques are relevant to this context.

14.3 Educators’ beliefs on the existing criticisms of SRL

1) SRL favours individualism

The theoretical debate on the type of ‘self’ within in SRL highlighted by Vassallo is quite philosophical and was beyond the scope of practical classroom applications. It is the opinion of this researcher that Vassallo and Martin’s work on deconstructing the Self within SRL is important for the SRL literature but it did not translate to the classroom level. However, all the educators did share a concern for Vassallo’s claim that SRL literature focuses too much on the individual. They all agreed that learning is a deep social element and that any serious learning theory needs to incorporate collaboration and the community – along with the self. Educators were cognisant of the communal aspect but were not ready to dismiss SRL based on the criticism that SRL is too individualistic. Rather, they viewed a focus on the individual was critical for
establishing collaboration and dialogue. In other words, they used SRL as one of many tools to scaffold dialogue. As described by Educator #5 (Tristan):

Learning to be able to participate in a classroom discussion is something that every learner has to find in themselves, to participate, which totally goes into the SRL theory. No one can tell you to keep on raising your hand or commenting or questioning other people’s ideas; you have to find the strength and courage in *yourself* [emphasis added]. It takes a lot of courage to participate in the dialogue as yourself.

In this sense, it was not that the educators disagreed with SRL being too individualistic; instead they used this individualism to aid social collaboration. Educators acknowledge that the individual and the social are interrelated and used SRL to focus on the individual part of collaboration.

This reasoning is tangential to the criticism voiced by Vassallo. It may be that SRL overvalues the expressive-self over the communal-self. However, it appeared irrelevant to the educators because they used this individualistic focus to aid collaboration. It could be problematic if these conceptions of SRL were used exclusively but that was not the case in this context.

2) SRL favours middle class values

This middle-class critique of SRL was interesting in that it challenged the educators thinking of SRL – they had never thought of it in this way before. After discussions and elaboration of Vassallo’s critique educators were sympathetic to the argument. This is not surprising considering socio-economic status (SES) has been widely known to be a strong predictor of achievement (Sirin, 2005); naturally this finding would impact success in SRL as well.
Educators mirrored this concern; however they were not confident that SRL unfairly favours middle class ideals. Educators’ reasoning resembled Hadwin’s response to Vassallo, in that they viewed the “forced independence” that derives from poverty would be conducive to self-regulation. The problem lies in whether or not schools and educators are equipped to recognize these forms of independence/regulation. Educator#6 (Pat) described this issue in their experience outside of Finnish contexts where they encountered students who were impressively independent and capable outside the classroom but that this did not translate well into classroom achievement. A solution to this came from Educator#5 (Tristan) who suggested that the key to successful teaching (being through self-regulation or otherwise) is having an in-depth knowledge of students that is gained through love and dialogue. In this way, even if self-regulation unfairly disadvantages lower-income students, knowledge of that student can circumvent this. There is a qualitative difference in trying to correct a pupil’s tardiness through self-regulation when they are late because they played outside for too long or if they had to take two connecting busses by themselves to get to school. The second example shows effective self-regulation, but one that might get overlooked by educators if they do not have sufficient knowledge and backgrounds of their students. Once an educator knows this information they can use it to help facilitate regulation. As Tristan explains, they talk to the child about the responsibilities they have at home (chores, taking care of other siblings, cooking, etc.) they can tell the student “If your brain can do that it can do this [regulation at school] too, it’s the same skill.” Pat complements this by arguing that Finland does well in bridging home and school life:

…Finland is doing well at translating those informal learning’s in the home world with what happens in the classroom world, the home life/culture life, is
well understood in the school life. What I will argue is that in other nations or cultures is that the learning in school life is not being translated well the school life.

Lastly, Tristan admits that they do not often deal with working class children. However; Tristan explains that Finnish children often exhibit similar independence and responsibilities that are forced on other disadvantaged youth through a common culture of independence. This culture of independence is related to the ease of navigating school/life contexts Pat was discussing. It is not uncommon, to have young children bike themselves to school in the morning, bike back home and do their homework and feed themselves independently. The principle difference these rearing practices are done through a cultural upbringing and not through a forced economic situation.

In essence, Vassallo’s argument may still be relevant to SRL literature as a whole, and was useful in probing educators’ thoughts and beliefs about their practices but it was not reflective of problems within this context. In the SRL School’s context informal regulation did not tend to stem from economic inequalities but rather cultural upbringing. Thus the overall criticism of SRL being too middle class was not problematically applied.

3) SRL favours a banking style education as it encourages the regulation/adaption of oneself instead of the regulation/adaption of the environment

This is perhaps the strongest criticisms against SRL as it implies SRL is antithetical to education as it promotes a regulation to doctrine instead of promoting social change through the adaptation of the environment instead of the individual. However, this criticism was not relevant to this context as its educators did not accept its premise for two key reasons.
Firstly, there is an intrinsic paradox that Vassallo does not address. As discussed above, Vassallo uses Freire to illustrate that SRL promotes a banking approach by assuming that educators have the prior knowledge of what SRL is and then must give it to its students. However, even in Deweyan education, the concept of democracy is “banked” on the students. As Educator#4 (Jamie) explains:

So if we say that we are democratic society, which is promoted by the school, there has to be ideas that encourage children to think for themselves. However, there is an inherent paradox here; at the school we are forcing children to be free, to think for themselves to be able resist force. We are using force; this is language which Kant uses\textsuperscript{13}, so that the children would be forced to be free. This is a pedagogical paradox that comes from the 17\textsuperscript{th} Century but is still relevant here. The school system in my mind it should be critical from the heart, it needs to be critical, for me that means that we teach children. This is our value and we are not asking the children…

As a result, Vassallo is right that SRL could be considered a form of subjugation, however so can democracy. As argued previously, democracy is just as much a value as any other and its enforcement of it in the classroom could be considered ‘banking’ in the same way SRL could be. The qualitative difference between the two is that democracy needs critical thought to be successful whereas SRL does not inherently (e.g. Behaviouristic views for training purposes). As a result, critical healthy conceptions of SRL are no more a form of indoctrination or banking then the promotion of democracy and equality.

This alludes to the second reason why SRL is not innately passive; is SRL can be conceptually thought as similar to critical pedagogy as they both share the emphasis on reflection. Again, Jamie explains that SRL can be conceptualized as systematic way of

\textsuperscript{13}Kant as a key figure to modern liberalism who struggled with autonomous individual which on the one hand is \textit{summun bonum}, yet on the other this same freedom is realized through the observance of laws and other key “power-structures” (Simeans, 2008).
interpreting one moment of critical thought. In this way, educators need to encourage skill and sensitivities that encourage the evaluation different viewpoints and/or goal choices. Pat agrees as he also argues that a key tenant to both is the notion of reflection and this practice bridges the two theories; “…SRL is a concept, a way of framing, this process of reflection. So regardless of the SRL literature and whether or not they really say it, but this idea of self-regulating is students are becoming aware of how to reflect on their own about a context or a question.” This emphasis on reflection referred to by these educators suggested that they did not use SRL to mould individuals to their environment. Rather they used SRL as one method to scaffold a critical pedagogy tenant; reflection.

14.4 Conclusion

In summary, Vassallo’s criticisms of SRL are relevant to the literature but they did not directly extend to this context. Although, discussing these issues was a good mental exercise for educators, Vassallo’s three concerns were not being practiced: SRL’s individualism was used to scaffold dialogue, the claim of a middle class focus was more reflective of a cultural ingrained independence, and overall claim of subjection was closer to a philosophical paradox inherent in teaching, one that promoted reflection.

Based on these three conclusions it would seem that this school incorporated critical pedagogical elements and set up learners for transformative experience. However, these elements remain unclear. There still remains the fact that the three educators within the SRL environment were unaccustomed to critical pedagogy themes. This unawareness had some immediate effects;
principally, critical practice is not applied to the wider, macro-issues, and the ‘isms’ revolving around educational practice. This allowed for certain offensive epistemologies - through underlining and unaddressed stereotypes and prejudicial thinking - to exist. Additionally, the absence of a strong critical pedagogy foundation also allowed for SRL to get mixed with questionable practices in the form of extrinsic rewards and unquestioned use of technology. These two practices do have strong associations of neoliberal dogma which Vassallo originally criticized. Ultimately, it is not that SRL is inherently biased toward neoliberalism; rather it is a need to create the awareness to this potential bias so as to ensure critical thought and equity – two fundamental prerequisites to a democratic classroom and by extension a democratic society – are explicitly conceptualized and practiced.

Vassallo softens his tone a little in the conclusion of his book *Self-Regulated Learning: An Application of Critical Educational Psychology*, when he admits, “my intention is not to encourage a wholesale rejection of SRL but rather to provoke critical conversations that invite possibilities for researchers and practitioners to reject, embrace or reflect on SRL” (Vassallo, p.163-4, 2013b). This researcher believes this goal was successful as it spawned this thesis. By extension, this thesis was successful in encouraging similar forms of much needed dialogue within the SRL School context. Additionally, it accomplished both its goals. The first of which was to analyze the degree to which critical interpretations are applied to SRL. This analysis showed that critical elements are present but a stronger and more explicit understanding of critical pedagogy is needed to fully embrace transformative functions. Secondly, to promote a ‘language of hope’ one that was accessible to outsiders of critical pedagogy. This was done by
extensively criticizing Vassallo and his critiques of SRL (along with SRL itself) and promoted an open dialogue with educators to gauge their own understandings. Combined, these goals offer a nuanced interpretation of SRL. In this context it was found that certain SRL critiques may not directly extend to the current classroom but that more discussions and interventions like the present study are needed to secure a solid understanding of critical pedagogy and ultimately promote transformative functions.

15 Discussion

This thesis has continued the critical pedagogical tradition by successfully creating meaningful dialogue and reflection with an SRL environment. However, there are some limitations that should be noted. Principally, language barriers; this researcher is unable to speak Finnish and the participants mother tongue was Finnish. Participants did speak English and when difficult topics were being discussed translators were used, however future research should mirror the native language of the participants and school environment. Additionally two other limitations existed due to financial and logistical reasons. First, this research occurred over a relatively short time span. Second, there was only one judge (myself) interpreting the interviews. It is recommended that future research take both a longitudinal approach to fully embrace the participant action research model as well as include a second judge to establish inter-judge reliability. Lastly, in the spirit of critical pedagogy it is also recommended that researcher seek out populations that are under-represented in the existing literature. It would be interesting to note the transformative functions of SRL of students in lower income areas or from Native American reserves or from Eastern Asian villages, etc.
That being said, this research was unique in the sense that it refrained from conventional Anglophone-Western populations. Additionally, it also extended critical pedagogy outside its North-American comfort zone by evaluating it in a social-welfare country. These applications led to the findings that SRL should not be taken for granted and assumed to be a-political and that an explicit critical pedagogy tradition should be present in order to highlight this and work toward transformative functions. This finding mirrors recent research (Thoutenhoofd & Pirrie, 2015) which concludes that in order to develop a more nuanced understanding of SRL (learning to learn) an interdisciplinary approach which “draws on the humanities and does not attempt to deny the inner world of the human imagination” (p.82) is needed. In this case, the interdisciplinary approach comes from shared understandings and dialogue derived from critical pedagogy practices. This gives both the educators and the learners the predisposition to orient SRL toward the deconstruction of dominant biases, to socially construct their learning and to promote an equitable learning environment that promotes democratic change and transformation.
16 References


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Appendices

Appendix 1
*A Comparison of Theoretical Views Regarding Common Issues in Self-Regulation of Learning*

<table>
<thead>
<tr>
<th>Theories</th>
<th>Motivation</th>
<th>Self-Awareness</th>
<th>Key Processes</th>
<th>Social &amp; Physical Environment</th>
<th>Acquiring Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operant</td>
<td>Reinforcing stimuli are emphasized</td>
<td>Not recognized except for self-reactivity</td>
<td>Self-monitoring, self-instruction, and self-evaluation</td>
<td>Modeling and reinforcement</td>
<td>Shaping behavior and fading adjunctive stimuli</td>
</tr>
<tr>
<td>Phenomenological</td>
<td>Self-actualization is emphasized</td>
<td>Emphasize role of self-concept</td>
<td>Self-worth and self-identity</td>
<td>Emphasize subjective perceptions of it</td>
<td>Development of the self-system</td>
</tr>
<tr>
<td>Information</td>
<td>Motivation is not emphasized historically</td>
<td>Cognitive self-monitoring</td>
<td>Storage and transformation of information</td>
<td>Not emphasized except when transformed to information</td>
<td>Increases in capacity of system to transform information</td>
</tr>
<tr>
<td>Processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Cognitive</td>
<td>Self-efficacy, outcome expectations, and goals are emphasized</td>
<td>Self-observation and self-recording</td>
<td>Self-observation, self-judgment and self-reactions</td>
<td>Modeling and enactive mastery experiences</td>
<td>Increases through social learning at for successive levels</td>
</tr>
<tr>
<td>Volitional</td>
<td>It is a precondition to volition based on one’s expectancy/values</td>
<td>Action controlled rather than state controlled</td>
<td>Strategies to control cognition, motivation, and emotions</td>
<td>Volitional strategies to control distracting environments</td>
<td>As acquired ability to use volitional control strategies</td>
</tr>
<tr>
<td>Vygotskian</td>
<td>Not emphasized historically except for social context effects</td>
<td>Consciousness of learning in the Zone of Proximal Development</td>
<td>Egocentric and inner speech</td>
<td>Adult dialogue mediates internationalization of children’s speech</td>
<td>Children acquire inner use of speech in a series of developmental levels</td>
</tr>
<tr>
<td>Constructivist</td>
<td>Resolution of cognitive conflict or a curiosity drive is emphasized</td>
<td>Metacognitive Monitoring</td>
<td>Constructing schemas, strategies, or personal theories</td>
<td>Historically social conflict or discovery learning are stressed</td>
<td>Development constrains children’s acquisition of self-regulatory processes</td>
</tr>
</tbody>
</table>

Source: Zimmerman & Schunk, 2001, p. 9
Appendix 2
Semi-structured Teacher interview tool

Introduction
The following questioned are designed to encourage thinking about teaching in both theoretical in practical ways. In no way are these questions designed to be evaluative, there are absolutely no right answers. Rather, my purpose is to try and bridge the gap between the theoretical work done by researchers and the practical work done by teachers to create a shared dialogue about education. In essence, I want to learn about teaching in the classroom and would like to use your expertise to discuss some ideas that I am currently struggling with. Participation is completely voluntary and if any time you wish to stop the process please let me know. In addition, if you have any questions or concerns about this process please raise them, as this is intended to be a shared dialogue and your input is truly valued and encouraged. All answers well remain anonymous; your name will not be collected or used and only I will have access to the recording.

The general theme of this dialogue is the application of Self-Regulated Learning theory (SRL) in the classroom and how it can influenced with ideas from critical pedagogy theory. Let us begin

Warm-up Questions

1) On a scale of one to ten (ten being ‘vital to my classroom’, one being ‘completely irrelevant’) how would you indicate the value of Self-regulated learning as an important theory for your pupils’ learning: __________

2) On a scale of one to ten (ten being completely comfortable, one being ‘I have never heard of it) how would you indicate your understanding of critical pedagogy theory: ______

3) What are your roles as an educator?

4) What are the roles of the learners?

5) What pedagogical strategies do you use the most in classroom? Why?

6) What do you think of this statement; Self-Regulated Learning Theory (SRL) and classroom subjects are neutral and value-free?

Long Answer Discussion Questions

1) In relation to students’ learning, how does SRL help in your classroom? How does setting goals on Monday and reviewing them on Friday aid student learning? How do you teach your students to create their own goals?

2) How do you know if a student has good SRL?

3) The programme claims to “modify school life to the 21st century learning needs” and focuses heavily on developing learners’ self-regulated learning. What are your thoughts about this goal? What do you think of the idea that ‘21st Century learning needs’ may be focusing too much on learning that is productive for the economy as opposed to focusing on transformative views of learning; learning for the
fun of learning? In this line of thinking, what type of subject matter, or content knowledge, do you think is important for SRL?

4) Do you think SRL focuses too much on the individual? Why or why not? [Depending on answer] How do you encourage community, collaboration, or a sense of shared-regulation in your classroom?

5) Are you at all concerned that the use of points in the classroom as a self-regulation technique encourages extrinsic motivation as opposed to intrinsic motivation. In other words, do you think that students do class work for the awarded points instead of doing it for the learning value of the activity? Why or why not?*14

6) Previously you have mentioned that you work very hard at engaging the students. Indeed, many educators struggle with this issue. One of the strategies used here in [ ] program is a variety of self-regulation techniques. In addition to this I would like to ask if you think the following might work15:

In my general experience students have a very strong sense of what is “right” and “wrong” at a very young age and are very motivated in discussing these issues. An idea is to use this to our advantage to motivate students by not only incorporating school subjects (like math) into real life contexts but also incorporate it to controversial and exciting issues that can stimulate the by engaging them in issues of social justice. Look at the following excerpt from a social justice math book, ‘Math that Matters’ (Stocker, D. (2006). Maththatmatters: A teacher resource linking math and social justice. CCPA Education Project.)

“Although the curriculum is ten kilometres wide and about one centimetre deep, many educators (supported by substantial research) now realize that effective learning requires depth and that if you spend time to develop it, the results far surpass skimming the surface Steven Zemelman and his colleagues note “covering less in more depth not only ensures better understanding, but increases the likelihood that students will pursue further inquiry of their own at later times….But let’s not forget the issue of content. Remember that ‘Math that Matters’ is concerned with a particular sphere of knowledge, because you can still have a constructivist classroom where students are actively finding the volume of a pizza box. In the end, thinking about things that have real meaning is more likely to promote learning”

What do you think about the above excerpt? Do you think it could apply to your classroom practice? Is it realistic? Do you think this idea would motivate students to develop mathematical concepts?

6) If the above excerpt is too abstract, look at the following lesson exercise in the accompanying .pdf file16. The following math lesson is intended to target the following math skills: Number Sense, Measurement, Patterning and Algebra and Data Management and Probability. These skills are connected with the following social justice topics: Class/Poverty and Civics/Community.

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14 Question marked with "*" indicate the question was used for the observed teacher only
15 For Teacher Drew a critical music education pedagogy was used, see Appendix 4
16 See Appendix 3
The idea here is not to get lost on specifics of this example but assess whether you think something like this could be useful in your classroom. Why or why not? Would it motivate the students to engage in mathematical thoughts more than traditional textbook exercises? Is it a good alternative to awarding points? Why or Why not?

See accompanying PDF file.

7) Read the following excerpts and describe whether or not you agree with the following excerpts about Finnish student life and other thoughts that come to mind while reading this:

However, what has been ignored is the fact that the joy of learning vanishes early on during the pupils’ learning life (see Helsinki Times 10-16 January 2013). In other words, Finnish students do not thrive at school: the atmosphere at school has proven lower than in average in OECD countries and students have a negative attitude toward school (e.g., Kämppi et al., 2012). In addition, although they know how the society works, and their knowledge of civics is good in international comparison, their willingness to political participation is lower than in other OECD countries (see Kupari & Siisiäinen, 2012). Simultaneously, more and more expressions of violence and malaise take place in schools and youth camps (Elovainio et al., 2011; see also Horsthemke, 2009; Kaltiala-Heino et al., 1999). The tendency is worrying.

and

For us educators in Finland, it is not important that Finland may be number one in math or science in PISA rankings but rather that we have a student body that walks through life with “eyes wide open” – eyes that are not only engaged with their community but also with eyes that are keen on observing the oppressive nature of their own realities; and that students are able to find their voice in the classroom and in the community.

Do you think this lack of motivation described above applies to your classroom? Do you think SRL addresses this problem?

8) A central concept to the theory of Critical Pedagogy is the idea and practice of reflection. I would like you to reflect on last week’s Chinese lesson. What did you think about it? What were your goals for the lesson? Where they accomplished? What did you like about the lesson as a whole? What would you change for next time?*

The Lesson:

Video used: https://www.youtube.com/watch?v=jekQMQwmHN8

KIINA-PROJEKTI
"Tuhansien pilvien ja virtojen keskellä elelee joutilas mies.
Päivät hän vaeltaa vihreillä vuorilla,
yönsä hän nukkuu jyrkänten juurella.
Kevää ja syksyt kuluvat nopeasti, 
mutta hänen mielensä on hiljainen,
vapaa tomun ja vaivan maailmasta.
Miten viihtyisää: olla tunkeutumatta mihinkään, tyynenä kuin syksyisen virran vedet."
Hanshan

1. Lue oppikirjan kappale Kiinasta huolellisesti (10 p.)
2. Tee Keynotella dia opettajan antamasta aiheesta Anna esityksellesi nimi (5 p.)
3. Paina jakonappulaa ja valitse "avaa toisessa ohjelmassa" ja sieltä "slides" (5 p.)
4. Etsi tietoa aiheesta (10 p.) Käytä hyväksesi alapuolella olevia videoita ja luokassa olevia kirjoja.
5. Kirjoita tärkeänä pitämäsi tieto omin sanoin hyvällä suomen kielellä Slidesiin. (10 p.)Etsi aiheeseen liittyvä kuva. (10 p.)
6. Voit tehdä toisen Kiina-dian siitä aiheesta, mistä haluaisit eniten saada tietoa (20- 30 p.)
7. Käy lataamassa työsi tähän alle ja palauta se!" (5 p)
8. Vaihtakaa ryhmänne oppilaiden kanssa iPadeja, lukekaa ja antakaa palautetta toistenne töistä. (10 p. / kaverille annettu palaute)

Tästä työstä voit saada max 115 pistettä. Montako sait?

9) A central concept of critical pedagogy is equity especially in how it relates to multiculturalism. One of
the major theorists of Critical Pedagogy is Paulo Freire. He argues that a classroom should foster critical
inquiry and reflection using classroom experiences that address power relations and challenge pupils’
assumptions of the world, in other words; to develop ‘praxis’ by both reflecting and acting on the world
to ultimately transform it equitably.

Do you think the Chinese lesson accomplished this? If, now how could it be improved?
Did you notice that a few students were stretching their eyes and laughing, how should this be addressed? Did
you notice that one student was saying that all Asian people are the same? Do you think it is problematic that on
one day students learned about Chinese writing and on the next day they practiced Japanese writing in Art? *

10) You have mentioned that one of your classroom goals is to foster discussion and dialogue in the
classroom. This is something that is also central to Critical Pedagogy theory. Do you think that the
discussion of racial stereotypes in relation to ‘KIINA-PROJEKTI’ would be a good way to create such
dialogue? Why or Why not? Do you think that students can be taught to promote dialogue through a
self-regulation framework?

11) Overall, do you think SRL is valuable in other non-Finnish contexts (e.g. in areas where students are
marginalized)?

12) What are your thoughts about this interview process? Was it helpful? Was it intimidating? Do you think
it produced effective dialogue on teaching practices? Did it affect your own teaching in any way?

"I believe that the unarmed truth and unconditional love will have the final word in reality. This is why right, temporarily defeated, is stronger than evil triumphant."

- Martin Luther King

Who would've thought it? Twenty odd years ago a Nobel prize winning economist named James Tobin suggested that we raise some money for global social causes by taxing currency exchange transactions. Dubbed the "Tobin Tax", it's gaining favour around the world as we sit here and do math.

Over $5 trillion a day changes hands on foreign exchange markets, but 80% of that figure is speculative. In other words, most of the trading has very little to do with products (fire lumber, or pork bellies, or steel) and a lot to do with currency gambling. A currency speculator bets on whether a currency will rise or fall in the short term future, if they guess right, they make money.

Unfortunately, this casino-like gambling process pulls huge sums of money out of national economies very quickly and other speculators quickly pull out of the burning ship as well, in a domino effect. The country is left in financial crisis and money that normally goes into social programs is frantically used by the government to prop up their currency. The most vulnerable people suffer, as witnessed in the recent currency crises in Latin America, Asia, and Africa.
Putting a small tax on each currency transaction would make it less profitable to speculate and would raise money for global causes. A tax of 0.1% (or 10 cents for every $100) could raise between $50-$300 billion each year. Compare this to the United Nations' estimate for universal social services to end poverty: $40 billion per year.

Who would be opposed to the Tobin tax and for what reasons?

1. The Foreign Exchange Market (FOREX) is the richest market in the world. More than $1.2 trillion worth of currency is traded each day.
   a. A stack of $100 bills amounting to one million dollars is about 83 meters (or 6 feet) high. How high would a stack of $100 bills be equivalent to the $1.2 trillion worth of currency traded each day?
   b. Compare this height to the height of Mount Everest.
   c. Remember: that's each day.

2. There are 250 trading days in the year.
   a. How high would that stack be in one year?
   b. Compare that with the distance from the Earth to the moon.

3. The relationship between the amount of money we spend on goods and services everywhere in the world each year (G) and the amount of money that is traded in the currency exchange market (C) is as follows:
   
   \[ C = 50G \]
   
   a. How much is the annual amount of money we spend on goods and services compared to the amount we spend on speculative gambling?
   b. Why is spending on goods and services likely to be more healthy for a country than speculative gambling?

4. The purest form of speculation is called "arbitrage." Suppose that the exact same product, let's say pork bellies, are selling on two different stock exchanges for different prices. On market A, they are selling at $50 a share. On market B, they are selling at $50.25 a share. Arbitrage is where you buy the shares on market A and immediately turn around and sell them on market B.
   a. You have access to $500,000. Using the above example, how much profit can you generate by speculation on the pork bellies?
   b. Since the transaction is essentially instantaneous, how much risk to your money would you have experienced?
5. Here's how speculation in foreign currency works. Let's say you think that the Japanese currency, the Yen is going to go down in value. You borrow a lot of Yen, and then convert that Yen into another currency that you think will be stable. If the Yen then goes down in value, you pay back your loan and make a profit. Try it:

a. Borrow 5,000,000 Yen. Convert your Yen into Canadian dollars ($1 CDN = 80 Yen). How many Canadian dollars do you have?

b. Let’s say the Yen devalues and now $1 CDN = 120 Yen. Pay back your 5,000,000 Yen. How much do you have left over in Yen? In Canadian dollars?

6. If you speculate to make profit, you're not always going to be correct. The following is a speculation game, where you may lose your investment.

a. Create a table showing all of the possible sums if you roll two dice together.

b. How many possible different rolls are there?

c. Based on table #1 below, bet on a category (for example, "the currency will jump slightly in value"); and invest a certain amount of money (for example, $100,000). Roll the two dice.

d. Refer to table #2 to see how you did. Calculate your profit or loss.

<table>
<thead>
<tr>
<th>Table #1: Pick a Category...</th>
<th>Table #2: If you roll...</th>
<th>The result is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;The currency will jump a great deal in value&quot;</td>
<td>A sum of 2 or 3</td>
<td>You're really right- profit 10% of your investment</td>
</tr>
<tr>
<td>&quot;The currency will jump slightly in value&quot;</td>
<td>A sum of 4 or 5</td>
<td>You're pretty close- profit 5% of your investment</td>
</tr>
<tr>
<td>&quot;The currency will fall slightly in value&quot;</td>
<td>A sum of 6 or 9</td>
<td>You're off, but not too badly- lose 5% of your investment</td>
</tr>
<tr>
<td>&quot;The currency will fall a great deal in value&quot;</td>
<td>A sum of 11 or 12</td>
<td>You're way off- lose 10% of your investment</td>
</tr>
</tbody>
</table>

- What is the probability that you are "really right"? In the real world, how might you increase your chances of being "really right"?

- Why don't you profit if the currency does not change in value?

7. Computers can now do much speculation without the aid of human intervention. Programs update prices at a rate of 200 times per second. What fraction of a second does it take to update prices (numerically as a decimal number and in words)?

2/200 = 0.01 second
8. Let's pretend that you are in charge of a committee to distribute the money collected from a Tobin Tax ($500-900 billion per year). What would you spend the money on? The following chart shows the additional amount of money required each year to adequately address these social issues.

### Amount (in billions of dollars) Per Year

<table>
<thead>
<tr>
<th>Social Issue</th>
<th>Requirement (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care</td>
<td>$900</td>
</tr>
<tr>
<td>Education</td>
<td>$670</td>
</tr>
<tr>
<td>Baby health</td>
<td>$53</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>$35</td>
</tr>
<tr>
<td>Reproduction</td>
<td>$25</td>
</tr>
<tr>
<td>Carries and children</td>
<td>$25</td>
</tr>
<tr>
<td>Unemployment</td>
<td>$5</td>
</tr>
<tr>
<td>Immigrants</td>
<td>$3</td>
</tr>
<tr>
<td>Health care</td>
<td>$900</td>
</tr>
</tbody>
</table>

### Food for thought...

#### Annual Expenditures

<table>
<thead>
<tr>
<th>Social Issue</th>
<th>Requirement (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>$98</td>
</tr>
<tr>
<td>Families</td>
<td>$15</td>
</tr>
<tr>
<td>Older adults</td>
<td>$44</td>
</tr>
<tr>
<td>Homelessness</td>
<td>$64</td>
</tr>
<tr>
<td>Homelessness</td>
<td>$61</td>
</tr>
<tr>
<td>Mental health</td>
<td>$97</td>
</tr>
<tr>
<td>Current and future needs</td>
<td>$50</td>
</tr>
<tr>
<td>Health care</td>
<td>$50</td>
</tr>
</tbody>
</table>

- Try currency speculation yourself to get a sense of how it works; there's an excellent game at www.warrenwww.org/game.
- Call your Member of Parliament and ask them what they are doing, if anything, about the implementation of a Tobin Tax.

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Lesson number 165
Appendix 4

Picture of chocolate box being sold at the school, taken by researcher on March 15th 2015.

Appendix 5

Picture of goal setting instructions in front of the classroom, taken by researcher on April 2nd 2015

1) Is measurable 2) is made within a time table 3) is possible to accomplish 4) challenges my learning and 5) is in line with the goals of our class.
Appendix 6
Picture of a list of questions generated by Educator#5 (Morgan)’s students based on the chocolate box label

1. Where are they?
2. Why the sun is white / clothes are white?
3. Why persons are black?
4. Is the picture racist?
5. Are the persons female?
6. Are their hands joined?
7. Why are they kissing?
8. Exceptionally red lips?
9. Why another one has a drum?
10. Why so many jewelleries?
11. Name?
12. Product → picture?