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# Enhancing student wellbeing in secondary education by combining self-regulated learning and arts education

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#### Abstract

A low level of student wellbeing is considered an important indicator of risk for stagnation in secondary schools. The development of students' self-regulatory skills leads to an increase of task setting, problem solving behaviour, etc. and could therefore serve as a strategy to improve school wellbeing and ultimately achievement. Due to its positive influence on the study environment, arts education is conducive to students' wellbeing as well. The present paper presents a theoretical exploration of the benefits of implementing arts education and self-regulated learning principles for student wellbeing, as well as the opportunities of combining both learning approaches.

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## 1. Background & problem statement

Educational effectiveness research has shifted from an exclusive focus on academic achievement as a sole output variable to a broader approach taking affective output factors into account as well. As a result, more attention is paid to the more subtle aspects of school life such as student wellbeing (Opdenakker & Van Damme, 2000; Van Petegem, Creemers, Aelterman, & Rosseel, 2008). Whereas different types of wellbeing (e.g., physical, psychological, social and cognitive wellbeing) have been identified (Pollard & Lee, 2003), current research considers these as various dimensions of wellbeing (Fraillon, 2004). Within the wide range of definitions of wellbeing, only a few focus specifically on student wellbeing as opposed to general wellbeing (De Fraine et al., 2005; Engels et al., 2004; Fraillon, 2004). Noble and Wyatt (2008, p.21) defined student wellbeing as "a sustainable state of positive mood and attitude, resilience, and satisfaction with self, relationships and experiences at school. A student's level of wellbeing is indicated by the degree to which the student demonstrates effective academic and social and emotional functioning and appropriate behavior at school".

Wellbeing is considered an important indicator of risk for stagnation and a problematic career at school. A

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decline in wellbeing sooner or later results in lower achievement and may lead to retention, which, when accumulated over the years, can evolve to the point where leaving school without qualification is inevitable. In order to enhance achievement and ultimately decrease dropout in secondary education, noticeable low levels of wellbeing should be tackled (Noble & Wyatt, 2008).

A low level of wellbeing is often related to detrimental behaviour such as a lack of commitment and an antischool attitude (Van Petegem et al., 2008). Enhancing students' wellbeing can increase academic achievement, both in a direct and indirect way. For example, higher levels of wellbeing positively affect academic achievement by increasing student motivation, engagement, and attendance, and by decreasing problem behaviour (Noble & Wyatt, 2008). Conversely, wellbeing can be the result – as opposed to the cause – of successful academic experiences and occur as an outcome of high achievement levels. These two processes are described as 'the good circle', i.e. the beneficial and reciprocal continuity between achievement and wellbeing. High achievement increases student wellbeing, which enhances student motivation, which again leads to higher academic achievement scores (Van Petegem, et al., 2008).

The benefits of well-developed self-regulation skills to achievement have been distinctly denoted (Boekaerts, 1997; Cleary & Zimmerman, 2002; Perry & Vandekamp, 2000; Winne, 1997; Zimmerman, 2002). Current learning approaches fostering students' self-regulated learning (SRL) were found to increase task setting and problem solving behaviour, which in turn are beneficial for school wellbeing too (Kaplan & Maehr, 1999; Noble & Wyatt, 2008).

Compared to the impact of SRL on academic achievement, the effects of arts education are more diffuse. Although the integration of arts at school should not be justified by secondary non-arts effects (Winner & Hetland, 2000), arts education appears to bring about other, more elusive, outcomes (Harland et al., 2000). Arts education projects provide a safe place for pupils to experiment, permits them to take initiative and risks, and promote the constructive acceptance of criticism (Barry, 1990). Therefore, arts education programs also have the potential to be beneficial to school wellbeing. Furthermore, combining arts education and self-regulated learning appears to entail great opportunities. Arts instruction requires skill development and goal setting, assigns an important role to self-reflection and expects learners to self-regulate. Approaches to arts education are typified by methodologies based on the notion of self-regulated learning, such as the inclusion of tests integrating all learning fields and highly active participation of learners during workshops (De Backer, Lombaerts, Peeters, & Elias, 2012).

Against this background, the present paper examines the possibilities of heightening the level of students' wellbeing by involving pupils in arts education emphasizing principles of self-regulated learning. From a theoretical perspective, we investigate the relationship between student wellbeing and self-regulatory and arts education processes as well as the potential benefits of combining these two learning approaches.

## 2. Wellbeing and self-regulated learning

Over the past quarter century, research on learning and instruction has indicated overwhelmingly that self-regulated learning is desirable. It refers to independent, academically effective forms of learning involving high degrees of metacognition, motivation and strategic action (Zimmerman, 2002). The ability to manage one's own learning processes is found constitutive for success in problem solving and learning transfer in and beyond school. It leads to high levels of intrinsic motivation and task interest, and increases academic achievement and outcomes (Boekaerts, 1997; Cleary & Zimmerman, 2002; Perry & Vandekamp, 2000; Winne, 1997; Zimmerman, 2002). A lack of self-regulation is therefore considered one of the major causes of students' failure during learning (Cubukcu, 2009).

Whereas at first sight the concepts of SRL and wellbeing do not seem to be related, a range of potential indicators of wellbeing also occur in the self-regulatory learning cycle (Duckworth et al., 2009). This cycle delineates a self-directed process through which abilities are transformed into task-allied skills spread over three phases: one before learning efforts, one during behavioural implementation and another one after each learning effort (Zimmerman, 2002). Student wellbeing is directly linked to four concepts linked to this cycle: task analysis, engagement, a strength-based approach and problem solving behaviour.

An important part of the forethought phase of self-regulated learning concerns task analysis and more specifically goal setting and strategic planning, which is followed by the elaboration of task strategies during the performance phase (Zimmerman, 2002). Such approach of strategic thinking is seen as highly contributing to the wellbeing of

students. Students who set proximal goals and self-motivators – both self-regulatory strategies – will display higher levels of self-efficacy (Bandura & Schunk, 1981) and as a consequence a higher satisfaction in life and school (Kaplan & Maehr, 1999; Noble & Wyatt, 2008).

Further, for effective self-regulatory learning to occur, pupils have to be intensely and actively engaged during their own learning (Duckworth et al., 2009). Apparently, being engaged appears to be essential to students' health and wellbeing (Willms, 2003).

The self-directive process that allows pupils to control their own learning provides them also with a clear view of their academic strengths and weaknesses and how to act accordingly (Zimmerman, 1990, 2002). This strength-based approach is found to be of great importance to promote student wellbeing (Noble & Wyatt, 2008).

Next to the promotion of strategic thinking and a high level of engagement, the development of social and emotional learning is another significant pathway to wellbeing (Noble & Wyatt, 2008), including planning and problem solving. Skilled self-regulated students are able to analyse the demands of new learning tasks in relation to their academic strengths, and form appropriate decision-making strategies during problem-solving (Zimmerman, 1989). When fostering self-regulation, students develop problem solving capacities and potentially a higher level of wellbeing (Noble & Wyatt, 2008).

#### 3. Wellbeing and arts education

The more pathways to wellbeing are accessible for students, the higher their level of wellbeing is likely to be. Apart from the focus on engagement, a strength-based approach, problem solving behaviour, task analysis and the increase of self-efficacy, intervention on wellbeing level can be performed in many other ways, e.g. by providing students with a psychological and emotional safe environment and a supportive and caring school community, and by teaching them pro-social values (Engels et al., 2004; Noble & Wyatt, 2008).

Apart from the above-described link between self-regulation and engagement, arts-infused curriculums and quality arts education are found to be a positive catalyst for engagement, resulting in improved attention behaviour and attitudes. After the implementation of a school-wide arts focus, fewer pupils get suspended (Lorimer, 2011). Moreover, student engagement is considered a necessary condition for and a strong indicator of a quality arts learning experience (Seidel et al., 2009).

A safe, supportive and caring school community depends on an extensive range of factors (Noble & Wyatt, 2008). Positive teacher-student and peer relationships are fundamental in this context. Additionally, a certain level of parental involvement and support in students' education are designated. Engagement in an arts-rich process by both students and teachers steers the alignment of their experiences. Involvement in arts provides both teachers and pupils with enjoyment (Harland et al., 2000). From a social perspective, research has proven an arts-based learning approach to be beneficial for relationships at school and in the community. It even leads to more involvement of the community and family in education. When participating in arts education, students learn to appreciate each other in new ways. They learn how to be mindful, supportive and cooperative with one another and how to show mutual respect (Bamford, 2007, 2006; Seidel, Tishman, Hetland, Palmer, & Winner, 2009). A qualitative arts setting entails a creative 'thinking space' and safe environment, which requires mutual openness of students. It is a place where students can act without restraint (Prummel, 2006). This is exactly the type of environment pupils need to obtain a higher level of wellbeing (Noble & Wyatt, 2008).

Arts programs are also ideal to promote pro-social values. A study of Kim (2005) investigated the effect of arts programs on children with autism spectrum disorders. A decrease of disruptive behaviours and improved pro-social behaviours were observed. Furthermore, these results maintained after withdraw of the program. Other research results have also shown a positive effect of arts on youngsters' pro-social development and emphasized the importance of a broader developmental approach (Stone, 1998).

In general, disadvantaged learners or students who are traditionally alienated from the school seem to benefit most from arts education both on the level of wellbeing and achievement. Especially for boys and marginalised pupils, arts-rich programs appear to encourage more focused classroom activity (Ingram & Seashore, 2003; Seidel, Tishman, Hetland, Palmer, & Winner, 2009). This potency makes quality arts education highly applicable for heightening student wellbeing and in this way reducing the risk for a problematic academic career.

#### 4. Conclusion and discussion

Any learning process can be used to promote learners' self-regulation. In order to turn students into successful self-regulated learners, Dignath-van Ewijk and van der Werf (2012) point out the importance of instructing metacognitive strategies by teachers as well as the realization of learning environments that enable self-regulation. Arts settings create a laboratory atmosphere and therefore bear the potential to create such high SRL environments. There are diverse parallels between the processes of self-regulation – the forethought, performance and self-reflection phase – (Zimmerman, 2002) and the working methods used in arts-infused education. In settings of compulsory and formal education, however, students get only few opportunities to demonstrate initiative and mostly confine themselves to very primary and passive learning strategies such as following directions and listening. As a matter of fact, both high and low scoring students seem to demonstrate high levels of self-regulation and engagement in arts classes. Regardless of the nature of the technique used during arts instruction, arts projects involve skill development and challenging goals, and enhance students' metacognition and self-efficacy. The main question is still to what extent student self-regulatory behaviour is tied to the mode of instruction. If students are supposed to transfer their self-regulation skills from arts settings – where these appear naturally – to a regular classroom setting, they must have the opportunities to develop and successfully apply those strategies so they can identify other settings to use them (Baum, Owen & Oreck, 1997; Oreck, 2004).

Most arts-educators believe that both arts integrated curriculums and dedicated classes taught by arts specialists are indispensable for a strong arts educational school program (Seidel et al., 2009). Teachers however do not appear to know how to initiate creativity in their teaching practice or feel like they lack experience to design arts-infused lessons (De Backer, Lombaerts, De Mette, Buffel, & Elias, 2012; De Backer, et al., 2012). Similarly, they seem to find it hard to decide the amount and the form of guidance when allowing a high degree of independence in learners to promote a higher level of self-regulation (Lombaerts et al., 2009; Perry & Vandekamp, 2000). Apparently, both self-regulation as well as arts education are considered difficult to introduce by teachers in their day-to-day teaching practice. Teachers' workload has become more complex and extended over the last decades (Easthope & Easthope, 2010). However, integrating arts in school policy might offer a fresh approach to teaching (De Backer et al., 2012). The combination of self-regulatory principles and arts education might lift up part of the stumbling blocks that these two innovative teaching approaches bring about separately. More research is needed however, to define the concrete elaboration of this concept. Additionally, quality arts education on the one hand and the promotion of self-regulation skills on the other hand can be highly contributory to meet pupils' learning needs, resulting in increased school wellbeing. Moreover, these two teaching approaches appear to be mutually reinforcing which makes the integration of self-regulatory principles into arts projects evident.

Noble and Wyatt (2008) identified different ways to facilitate the development of wellbeing, including physical and emotional safety, a strength-based approach, pro-social values, a supportive and caring school community and social and emotional learning. Additionally, Kaplan and Maehr (1999) found task goals to be a profound positive predictor for all measures of wellbeing and a negative predictor for disruptive behaviour. A significant positive relationship has been detected between goal orientation and all indices of wellbeing, as well as perceptions of academic self-efficacy. Self-regulation skills programs and arts programs have separately demonstrated the improvement of the different pathways mentioned above to achieve a higher level of student wellbeing. Research is required to evidence this, but synthesizing the two innovative teaching approaches referred to in this paper into one program could compile a decisive and effective intervention to enhance students' wellbeing.

# References

Bamford, A. (2007). Quality and consistency: Arts and cultural education in Flanders. Brussels: Agency for Educational Communication.
Bamford, A. (2006). The Wow Factor: The global research compendium on the impact of arts in education. Berlin: Waxmann Münster.
Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy and intrinsic interest through proximal self-motivation. Journal of Personality and Social Psychology, 41, 586-598.

- Barry, N., Taylor, J., & Walls, K. (1990). The role of the fine and performing arts in high school dropout prevention. Tallahassee: Center for Music Research, Florida State University.
- Baum, S. M., Owen, S. V., Oreck, B. A. (1997). Using art processes to enhance academic self-regulation. Paper presented at *Arts Connection National Symposium on Learning and the Arts: New Strategies for Promoting Student Succes*. New York, February 22, 1997.
- Boekaerts, M. (1997). Self-regulated learning: A new concept embraced by researchers, policy makers, educators, teachers and students. Learning and Instruction, 7(2), 161-186.
- Cleary, T. J., & Zimmerman, B. J. (2002). Self-regulation empowerment program: A school-based program to enhance self-regulated and self-motivated cycles of student learning. *Psychology in the Schools*, 41(5), 537-550.
- Cubukcu, F. (2009). Learner autonomy, self regulation and metacognition. *International Electronic Journal of Elementary Education*, 2(1), 53-
- De Backer, F., Lombaerts, K., De Mette, T., Buffel, T., & Elias, W. (2012). Creativity in artistic education: Introducing artists into primary schools. *International Journal of Art & Design Education*, 31(1), 53-66.
- De Backer, F., Lombaerts, K., Peeters, J., & Elias, W. (2012). Visual arts as leverage for educational innovation in formal and lifelong learning. Procedia-Social and Behavioral Sciences Journal, 46, 1644-1648.
- De Fraine, B., Van Landeghem, G., & Van Damme J. (2005). An analysis of well-being in secondary school with multilevel growth curve models and multilevel multivariate models. *Quality & Quantity*, 39, 297-316.
- Dignath-van Ewijk, C., & van der Werf, G. (2012). What teachers think about self-regulated learning: Investigating teacher beliefs and teacher behavior of enhancing students' self-regulation. *Education Research International*, 2012.
- Duckworth, K., Akerman, R., MacGregor, A., Salter E., & Vorhaus, J. (2009). Self regulated learning: A review of literature. London: Centre for Research on the Wider Benefits of Learning, Institute of Education.
- Easthope, C., & Easthope G., (2000). Intensification, extension and complexity of teachers' workload. *British Journal of Sociology of Education*, 21(1), 43–58.
- Engels, N., Aelterman, A., Van Petegem, K., & Schepens, A. (2004). Factors which influence the well-being of pupils in Flemish secondary schools. *Educational Studies*, 30(2), 127-143.
- Fraillon, J. (2004). Measuring student wellbeing in the context of Australian schooling: Discussion paper. Commissioned by the South Australian department of Education and Children's services as an agent of the Ministerial Council on Education, Employment, Training and Youth Affairs. Retrieved 21 December, 2012, from http://www.mceetya.edu.au/verve/\_resources/Measuring\_Student\_Well-Being in the Context of Australian Schooling.pdf.
- Harland, J., Kinder, K., Lord, P., Stott, A., Schagen, I., & Haynes, J. (2000). Arts education in secondary schools: effects and effectiveness. York, UK: National Foundation for educational Research.
- Ingram, D., & Seashore, K. R. (2003). Arts for academic achievement: Summative evaluation report. Minnesota: Center for Applied Research and Educational Improvement. College of Education and Human Development. University of Minnesota.
- Kaplan, A., & Maehr, M. L. (1999). Achievement goals and student well-being. Contemporary Educational Psychology, 24, 330-358.
- Kim, J. (2005). Using an art program with peers to promote prosocial behaviors of kindergarteners with ASD. The Journal of Special Education: Theory and Practice, 6(2), 377-394.
- Lombaerts, K., De Backer, F., Engels, N., van Braak, J., & Athanasou, J. (2009). Development of the Self-Regulated Learning Teacher Belief Scale. European Journal of Psychology of Education, 24(1), 79-96.
- Lorimer, M. (2011). Arts-Infused Learning in Middle Level Classrooms. Journal for Learning through the Arts, 7(1).
- Noble, T., & Wyatt, T. (2008). Scoping study into approaches to student wellbeing; Literature review. Sydney: Australian Catholic University and Erebus International.
- Opdenakker, M. C., & Van Damme J. (2000). Effects of schools, teaching staff and classes on achievement and well being in secondary education: similarities and differences between school outcomes. School Effectiveness and School Improvement, 11, 165-196.
- Oreck, B. A. (2004). Enhancing self-regulatory behaviors in the classroom through arts-infused curriculum. Unpublished doctoral dissertation, University of Connecticut.
- Perry, N. E., & Vandekamp, K. J. O. (2000). Creating classroom contexts that support young children's development of self-regulated learning. International Journal of Educational Research, 33, 821-843.
- Pollard, E. L., & Lee, P. D. (2003). Child well-being: A systematic review of the literature. Social Indicators Research, 61(1), 59-78.
- Prummel, J. (2006). Het deurenpaleis: over creativiteit en onderwijs. [The Palace of Doors, about Creativity and Education.]. Brussels: CANON Cultuurcel.
- Seidel, S., Tishman, S., Hetland, L., Palmer, P., & Winner, E. (2009). The qualities of quality: Excellence in arts education and how to achieve it. Cambridge, Massachusetts: Project Zero, Harvard Graduate School of Education.
- Stone, A., Bikson, T., Moini, J., & McArthur, D. (1998). The arts and prosocial impact study: Program characteristics and prosocial effects. Santa Monica: RAND Corporation.
- Van Petegem, K., Aelterman, A., Van Keer, H., & Rosseel, Y. (2007). The influence of student characteristics and interpersonal teacher behaviour in the classroom on student's wellbeing. *Social Indicators Research*, 85, 279-291.
- Van Petegem, K., Creemers, B., Aelterman, A., & Rosseel, Y. (2008). The importance of pre-measurements of wellbeing and achievement for students' current wellbeing. *South African Journal of Education*, 28, 451-468.
- Willms, J. D. (2003). Student engagement at school a sense of belonging and participation: results from PISA 2000. Paris: OECD.
- Winne, P.H. (1997). Experimenting to bootstrap self-regulated learning. Journal of Educational Psychology, 89, 397-410.

Winner, E., & Hetland, L. (2000). The arts and academic achievement: What the evidence shows. Double Issue of *Journal of Aesthetic Education*, 34 (3-4), Fall/Winter, 295-306.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory Into Practice, 41(2), 64-70.

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. Educational Psychologist, 25(1), 3-17.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. Journal of Educational Psychology, 81(3), 329-339.