

Student Agency in Interactive Learning Environments

Jean Annan, PhD
Positively Psychology

ABSTRACT

Student agency refers to the actions students can and do make to influence their learning. In a rapidly changing world, students are offered new and exciting opportunities but must learn to be active and exercise agency in constructing their niches. Student agency is construed in this article as a variable quality, one that is actively negotiated and context dependent, embedded in students' cultural and temporal milieus. Four dimensions of student agency are proposed, each related to a personal or social understanding, skill or action. They are student voice, strategic agency, personal agency and connected agency.

Key words: student agency, teacher practice, negotiated learning, learning environments

INTRODUCTION

This article places student agency within an interactive context, positioning it as a variable part of a dynamic social system rather than a fixed personal attribute. It considers the nature of student agency, the reciprocal roles of those who exercise and encourage agency in schools, the circumstances that support students to actively assume agency and the relationship between agency and guidance.

The call for student agency

The rationale for encouraging student agency is multidimensional, concerning students' learning and development, well-being and rights as children (see Klemenčič, 2015; Kumpulainen, Lipponen, Hilppö & Mikkola, 2013; Proctor, 2014). The widely ratified United Nations Convention on the Rights of the Child (UN General Assembly, 1989) delineates the rights of children aged 0–18 and the accompanying responsibilities of governments. It stands to preserve children's interests in terms of survival, development

and protection and clearly states that children have the right to be active with regard to decisions that affect them. In short, children in those countries that ratified the Convention hold the right to voice their views with regard to their education, to have their voices heard and to see action resulting from the expression of their views and opinions. The ongoing transformation from a largely industrial to a technological world provides a compelling reason for promoting student agency. With changing means of connection and global migration, there are new opportunities for innovation amidst a degree of uncertainty about what form the future will take. Many environments, when compared with those of the past century, appear less fixed and predictable (Klemenčič, 2015). While the current circumstances provide new and exciting opportunities for advancement and fulfilment, as Prettyman, Ward, Jauk and Awad (2012) have suggested, they also demand that young people acquire the types knowledge, skills and values that enable innovation.

They must be active in accessing, using, exchanging and creating knowledge.

Fostering student agency involves creating solutions in real life situations and supporting young people to embrace uncertainty as they persevere through calculated trial and error. It means helping them find purpose and passion for learning and see learning as an ongoing activity. Agentic activity involves creative experimentation and the development of curiosity in learning environments that extend through schools, homes and communities (see Fullan, 2013; Prettyman et al, 2012).

NOTIONS OF AGENCY

Agency as a relational and temporal quality

Defining agency has not always been straightforward, particularly given the degree of subjectivity involved in assigning intentionality and the variation of expression of agency across contexts (see Arnold & Clark, 2014). Recent accounts of agency have suggested that it is a discursive practice, one that is dynamic and related to context. Agency is portrayed as a quality that changes in nature and strength as it weaves through interactions in context.

Agency is not represented in this article as a quality that a person has per se but one that is actively enabled under certain conditions; it is negotiated and shared among participants in an interactive environment. Active students assume agency in negotiation with adults and peers who simultaneously exercise agency to facilitate student learning (Fullan, 2013). Parents and their children may negotiate agency, continually adjusting the scaffold as young people acquire and create culturally embedded knowledge and skill (Dixon-Krauss, 1996; Wood, Bruner and Ross, 1976; Wood & Middleton, 1975).

Klemenčič (2015), drawing on social cognition and sociological theories, views student agency as a combination of the processes in which students relate to past, present and future choices of action and their perceived power to

achieve intended outcomes in given situations. Agency is seen as a temporal and relational quality, with students' reflections, intentions and interactions operating within their cultural, social, and political environments. Others have discussed similar views of the nature of agency. For example, Hilppö, Lipponen, Kumpulainen and Virlander (2015) consider agency to be a '*socially constructed relation between an individual's capabilities, aspirations, and perceived opportunities and limitations to take action with a given practice*' (p2). Similarly, Ma and Gao (2010) considered that developing agency meant becoming more autonomous in learning and taking charge of one's own learning through negotiation, providing an illustration of this interaction with tertiary students co-determining syllabi in conference with teachers.

Agency is clearly not a quality that can be understood through personal or social structures alone; it involves the articulation of relations between children and their worlds. This contextualised view of agency reflects interactive perspectives such as those described by Vygotsky (1978), Bronfenbrenner (1979) and Engeström (2001) in which both learner and environment are depicted as active in development. The interactive perspective implies that people as learners are not independent agents but pro-actively negotiate within active environments (see Bandura, 2001). The theoretical perspectives of participants in learning and teaching activity constitute major influences on the nature and extent of student and teacher agency. For example, teacher practices are influenced by the range of perspectives to which they have been exposed in life, training and professional experience.

The views of those involved in creating learning environments for students serve to position the learner as dominantly active or passive in the learning process (see Bowler, Annan & Mentis, 2007). Bowler et al., suggested that interactive theories consider both learner and environment to be active, or interactive. They explained that

interactive views contrast with those that position the learner as most active, such as Piaget's (1952) theory of cognitive development. They also contrast with the view that the environment is dominantly active, for example Skinner's (1938) operant conditioning. Encouraging student agency, therefore, requires that adults, school staff and students examine, and perhaps challenge, the beliefs they bring to teaching and learning.

Klemenčič (2015) has suggested that the development of student agency relies on six understandings. These are listed and briefly described below.

1. Student Agency is a constructed quality of action and interaction.

Student agency is a quality that is developed in interaction with the world.

2. Agency strength depends on the situation.

Students who have more knowledge, skill and access to information are better positioned to assume agency. Agency is strengthened through the cultivation of social networks and nurturing of cultural capital.

3. Student agency is temporally embedded.

Students understand their immediate environment through past experiences and future orientations.

4. Children's lives are embedded in unique complex contexts.

Unique contexts give rise to unique opportunities and challenges.

5. Student agency is inherently relational.

The actions of people with whom students interact influence their aspirations and possibilities.

6. There are three different modes of student agency: personal, proxy and collective.

Students may act directly to influence circumstances, access support from other

individuals to act indirectly or act as part of a collective.

Understanding student agency requires knowledge of the interactive context of students' learning. Rainio and Hilppö (2016) commented on the propensity of researchers to reduce complex situations to manageable units in order to render them comprehensible. While identifying dominant features of interaction between parties can lead to shared and coherent understandings, it is possible that important insights are not obscured in the process. Rainio and Hilppö suggest that inherent contradictions in multi-perspective situations may indeed be a part of the phenomena under study. Tensions might be usefully examined in order to understand the interactive context.

Agency and cultural relevance of learning environments

Agency is a fluid quality developed in context, the interpretation of events and the extent and form of agency assumed by students in the learning environment being socially and culturally mediated (see Rainio & Hilppö, 2016). Students are best supported to negotiate agency in those settings that hold perceived relevance for them and in which they can readily identify with practices and procedures (see Hawkins, 2005; Jackson, 2003; Nasir & McKinney de Royston, 2013; Purdie, Tripcony, Boulton, Lewis, Fanshawe & Gunstone, 2000). Therefore, a fundamental task of schools seeking to extend student agency is establishing connections with students' families and communities to facilitate the flow and exchange of authentic cultural information. Schools may collaboratively explore what the concept of family and school involvement means in their particular environments and ways that students can take active roles in learning within and outside of school (see Bouffard & Weiss, 2008; Lopez & Caspe, 2014).

Students' voices represent an essential component of student agency. Although parents, teachers and other community members can contribute valuable information about students' interaction in learning environments, it is only students themselves who can provide accounts of their experience of learning (see Kellett, 2010). When students', teachers' and parents'

views contribute to the co-construction of learning environments and form a mutually understood platform, the diversity of students' stories and identities can be understood with regard to the cultural settings that students experience.

A New Zealand study that sought to understand the connection between cultural identity and perceived aspects of success underscored the need to understand these notions from the students' points of view. Webber (2015) asked Māori secondary school students which aspects of their Māori identity were most important to them. Most students' responses related to belonging. Knowing who they were and where they came from provided a sense of security. Weber observed that their connection to their whānau, whenua and iwi (extended family, land and tribe) made them who they were. A strong sense of self for the Māori students was generated through connections with others and engaging in shared practices rather than striving for individual success for which many school systems are structured. Studies such as this provide a clear rationale for examining how school systems support their particular students to take an active part in their learning.

Teachers' roles in supporting student agency

Teachers, irrespective of the modes in which they operate, are agents of change. Their practice, informed by their personal and professional experience, influences the extent to which students are active or passive learners. For example, positive teaching approaches have been associated with agentic activity and student well-being (see Seligman, Ernst, Gillham, Reivich, & Linkings, 2009). In many instances, support for student and teacher agency will require that both teachers and students examine their stories of teaching and learning and their relative roles in the process. Narratives of agency in students' learning and teachers' practice can shed light on past and present events, providing examples of success that can help create supportive emotional climates for learning (e.g. Anderman & Levitt, 2014; Marques, Lopez, Rose & Robinson, 2014; Pekrun, 2014).

Facilitative teachers will be those who are active in understanding, encouraging and extending students as they acquire the skills and knowledge required to assume an active role within interactive learning environments (see Fullan, 2013). Negotiated and scaffolded teaching and learning approaches that encourage student agency contrast with traditional, expository modes in which students have been largely passive. Naturally, adults maintain their critical role in transmitting valued and temporally relevant knowledge but support young people to assume agency through an ever-changing scaffold. Sedeghi (2014) observed that when both teachers and students see they have agency in shaping learning within educational systems, they develop a greater sense of empowerment to influence outcomes.

Placing emphasis on the support of student-teacher agency in the co-construction of curriculum and practice demands high levels of commitment, professionalism and courage on the part of teachers. It requires a genuine commitment to encouraging student agency, sound understanding of the rationale for active participation of students, teachers and families and sufficient courage to nurture agency within systems that have not necessarily been designed with agentic students or adults in mind. Rajala, Kumpulainen, Rainio, Hilppö, and Lipponen (2016), observing the common contradiction between agency and control, have suggested that student agency might currently be supported through a balance of classroom management, instruction and active participation. Agency requires attention to the inherent contradictions of agency and control through the provision of opportunity for authentic negotiation.

TEACHER PRACTICES TO FOSTER STUDENT AGENCY

Various writers considering the topic of student agency and active participation have suggested or implied a range of teaching practices for teachers. These practices have been categorised into seven sections. Names of authors of works

that have alluded to the various practices are provided for those who wish to explore the concepts further. This is by no means a comprehensive list of practices to promote student agency. The interagency of students, teachers and families is currently the subject of research and much discussion from which we might expect to learn more.

1. Negotiating Learning

- » Generating options so that students have real and supported choice (Bandura, 2001; Keeffe, 2015; Klemenčič, 2015)
- » Recognising the uniqueness of children and individualised learning (Yoon, 2015)
- » Understanding what each child wants and needs to learn (Sadeghi, 2014)
- » Taking into account children's own aspirations, beliefs and competencies (Hilppö, Lipponen, Kumpulainen, & Virlander, 2015)
- » Distinguishing between agency in active learning and self-directed learning. Agency implies interaction (Hannifin, Hill, Land & Lee, 2014)
- » Reframing students' expressions of resistance or questioning actions as constructive, agentic events (see Rajala, Kumpulainen, Rainio, Hilppö, & Lipponen, 2016)

2. Linking learning to real life

- » Linking learning with valued practices (Annan, Annan, Wootton & Burton, 2014; Jackson, 2003; Webber, 2015)
- » Reflecting home/community culture in the classroom (Jackson, 2003; Klemenčič, 2015; Yoom, 2015)
- » Placing emphasis on real problems (Fullan, 2013)
- » Understanding the broader contexts of students' lives (Rainio & Hilppö, 2016)

3. Creating and supporting learning connections

- » Providing opportunities for learning inside and outside of the classroom (Klemenčič, 2015)
- » Facilitating chance encounters for learning through increased connections (Klemenčič, 2015)
- » Creating opportunities for discursive dialogue or meandering conversation (Arnold & Clark, 2013)
- » Making technology, artefacts and tools accessible to increase connections (Klemenčič, 2015)

4. Nurturing positive and optimistic attitudes

- » Nurturing students' sense of optimism, hope and trust (Bandura, 2001; Marques, Lopez, Rose & Robinson, 2014; Pekrun, 2014; Usher & Pajares, 2008)
- » Helping students and those who support their learning to view events through appreciative eyes (Anderman & Levitt, 2014; Seligman, Ernst, Gillham, Reivich, & Linkings, 2009)

5. Supporting reflection on learning

- » Teaching and encouraging the use of self-reflection skills (Arnold & Clark, 2013; Klemenčič, 2015)
- » Providing opportunities for self-reflection (Klemenčič, 2015)

6. Creating emotionally secure climates for learning

- » Demonstrating genuine caring about students' learning (Sadeghi, 2014)
- » Fostering a sense of purpose and passion for learning (Bruner, 1996; Fullan, 2013)
- » Maintaining consistent practice to allow students to feel secure, to be respectful of one another and to be ready to learn (Proctor, 2009)
- » Encourage students to welcome new challenges and appreciate learning opportunities in the face of less-than-favourable outcomes (Pekrun, 2014)

7. Fostering teacher agency

- » Ensuring teacher agency. When teachers have choice in shaping systems of education they feel valued and are better positioned to commit effort to supporting students' agency (Sadeghi, 2014)
- » Understanding the parameters within which student agency can be supported (Rajala, Kumpulainen, Rainio, Hilppö, & Lipponen, 2016)
- » Examining contradictions between agency and guidance/control (Rajala et al, 2016)

The features of the learning environment that teachers select to pursue (e.g. emotionally secure climates, creating and supporting learning connections) depend on the unique circumstances of the teaching/learning environments in which they participate.

DIMENSIONS OF STUDENT AGENCY

A review of contemporary student agency literature in this study indicated that this variable quality comprises four distinct but related dimensions (see below). The dimensions include the personal qualities and understandings individual students bring to particular events as well as social connections. The dimensions of student agency are: student voice, strategic agency, personal agency and connected agency. Each is briefly described below.

Student voice

Student voice includes students' perceptions of their power and influence on their learning. It involves students' beliefs about the ways their voices are received and their perceived positioning with regard to decision-making about their learning. The student voice category considers the extent to which students believe that the expression of their views results in positive changes in their educational environments.

Strategic agency

Strategic agency refers to the skills, knowledge and strategies that students develop and apply as agents in learning. It includes students' awareness of their particular learning environments, the people, settings and relationships that can support their learning and their tools for articulating knowledge in particular settings.

Personal agency

Personal agency includes those personal attributes required to be active or agentic learners. These attributes include preparedness to take agency and the belief that effort exerted in learning activity will be rewarded with success. This category also considers the extent to which students persevere when tasks are difficult and their propensity to bounce back when early attempts are not successful.

Connected agency

Connected agency includes students' perceptions of their social relationships in interactive learning. It comprises students' views of the extent to which they are able to work with other people learn, talk with others about learning, help other people and make learning connections across various settings.

These four dimensions offer one way of thinking about agency within an interactive learning environment although they are not the *only* means. There are many meaningful ways in which agency can be conceptualised and applied to generate a broad picture of 'agency in context'. For example, Hilppö et al (2015) suggested considering Greima's modalities 'to want to, to have to, to be able to, to know how to' in relation to agency and Klemenčič (2015) found Bandura's dimensions of free choice, optimism, conscious influences and uniqueness helpful in structuring agency. Despite variations in the categorisation, consistent across much contemporary writing is the notion that student agency operates within the interaction of a person and the social, cultural world. Agency

implies a degree of autonomy, an awareness of and concern for the surrounding social environment and the assumption that responsibility for learning is actively shared.

OBSERVING AGENCY

The uniqueness of students' and adults' lives means that determining whether or not a person is sufficiently active and taking agency in their learning is very much dependent on context. Agency does not operate independently of social relationships, cultural values, levels of trust or familiarity with tools and artefacts. In addition, the degree of subjectivity in agency, that is, the extent to which one feels agentic, and the possibility that a person's judgement may not concur with that of an observer, requires that understanding of agency is generated from the interaction of the actor and the observer. Understanding must be negotiated between students and teachers.

All four dimensions of student agency can be explored in relation to a specified context. The resulting descriptions of individual student's sense of agency can provide a snapshot of a single part of the interactive learning environment. To understand the positioning of agency in classrooms, students' sense of agency must be considered in conjunction with teachers' reflections' on the learning

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environments they facilitate and their own sense of agency. Consequent adaptations to teaching and learning interactions could be shaped in ways that increase the alignment of student agency and teacher practice.

SUMMARY

Those students who are able to exercise their right to agency in education are well placed to learn and enjoy high levels of well-being. Student agency is a dynamic quality that is created and shaped as teachers and students negotiate their learning environments and it is influenced by the multiple environments in which children develop. It is not a quality that can be measured in absolute terms or understood in isolation to the agency of others with whom children interact. However, examining the various dimensions of agency with individual students supports understanding of their sense of agency in learning which, in turn, can contribute to the development of educational practices to foster active participation and student agency. Teacher practices that encourage student agency include negotiating learning topics and activity with students, incorporating culturally relevant curriculum and practices, creating positive, emotionally secure environments and promoting quality learning connections between students and other people.

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