

How can upper secondary schools create inclusive learning environments?– Theoretical and empirical analyses of Inquiry Based Education

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Abstract

In this article we will explore the concept of Inquiry Based Education (IBE) on classroom level in secondary schools. We use casestudies to describe and analyze two different learning environments and give a theoretical and an empirical approach to understanding students' learning opportunities. In the article IBE is perceived as an academic way of thinking and learning and not just a pedagogical method. Taking this broad understanding, we use the concept of IBE as an educational approach and a theoretical framework. The article points to how different educational aims bring about different teacher - students relations and offer students different kind of learning possibilities and positions. It is further shown how different learning environments can open up for democratic praxis and experience and be understood as creating inclusive learning environment. The argument in the article is that central elements of IBE can contribute to more equality in education by creating inclusive learning environments that take into account different levels of the students learning processes.

Keywords:

Learning environments, Inquiry Based Education (IBE), inclusion, upper secondary education, educational policy

Introduction and background

We are concerned about how secondary educational institutions can create inclusive learning environments that can give equal opportunities and space for all youth to learn and to develop democratic competences. We will explore the concept of Inquiry Based Education (IBE) and its theoretical and empirical approach. IBE has a long history and the concept can be linked back to the 1960s and Dewey's theoretical approach to learning and teaching. The concept of IBE has been reinforced / reinvented in the school system in Denmark¹ although it has been questioned if the goals of IBE will be reflected in national educational goals and the PISA scores (Egelund 2008, Kreiner 2011, Stephenson 2012). Student centered education and IBE can be seen as a counterweight

¹ In science subjects see Frisdahl 2014, Østergaard et al. 2010, in general see journals / folkeskolen.dk and newspaper debates / Illeris 2010

to the more technological approach to education that is sweeping across Europe and the rest of the world. Thus, the European commission states:

Education and training policy should enable all citizens to benefit from quality education and to acquire and update over a lifetime the knowledge, skills, and competences needed for employment, inclusion, active citizenship and personal fulfilment. (European Commission 2014a)

As the above quote states, securing a high level of education for all citizens is high on the EU agenda and this strategic goal was introduced with the Lisbon declaration and the adoption of *lifelong learning* as a benchmark for education in the EU in 2000 (European Parliament 2000). It is stated that a well-educated population is essential in order to prepare the transition to a competitive, dynamic and knowledge-based economy, in order to develop the EU as the most competitive knowledge-based economy in the world (Rasmussen 2014). At this general level, a close connection between economic growth for the EU and opportunities and equality for the individual citizen is established. Opportunities to choose and complete an education and follow a career can thus be seen as essential for the EU as a region and support the democratic spirit and the individual's fundamental rights. However, at the moment, 7.5 million young Europeans aged between 15 and 24 are not employed, not in education or training (NEETs), which is about 13 % across the 28 member states (European Commission 2014b). Therefore, inclusion has been articulated as a crucial element in many European countries for primary and secondary educational institutions as well as for higher education where there is a focus on citizenship, democratic spirit and equal rights for all to learn and be educated. With the knowledge and skill-based global economy and the democratic societies, it is therefore essential to develop educational approaches and methods that include all youth, not least at the upper secondary educational level.

In Denmark, the central educational policy goal for the last two decades has been 'education for all'. The official goal is that by 2015, 95 percent of a cohort should have completed at least an upper secondary educational degree (Regeringen 2011). However,

this goal has proven very hard to fulfill and 15-20 percent of each cohort are still struggling to complete an upper secondary education. One challenge is to develop the system of secondary education in ways that overcome the present sharp division between general/academic education on the one side, and vocational education and training (VET) on the other (Rasmussen & Jensen 2014; Cort 2010; Undervisningsministeriet 2014). Another challenge is to develop pedagogical and methodological approaches at the school and classroom level that can contribute to inclusion. This latter pedagogical and methodological challenge is addressed in this article.

When addressing inclusion on a classroom level it can be important to distinguish between different factors that can lead to exclusion and the dropout or push out of students. Doll et al. (2013) distinguishes between three factors: Pull, push or falling out. Push out occurs when situations within the school environment lead to dropout. These situations can be understood as the student reactions according to structures in the learning environment. The reaction can lead to for instance low attendance rates, low motivation for learning and conflict with discipline policies. The pullout can occur when the environment outside of school becomes more present in the students life then studying. This could for instance be the matter if students have financial worries, are offered employment, or experience family needs. The falling out factor refers to the process where students don't show significant academic progress in their schoolwork and they become apathetic or disillusioned. This is not necessarily an active decision, from the student but is rather to be seen as a result of insufficient personal and educational support.

The point to be taken here is that the students' academic achievement and school completion are more than just a result of an individual choice. We know that students that are at risk of not completing an upper secondary education are over-represented by young people with parents without an upper secondary education, youth from low-income families and/or with some kind of immigrant background. Also, young people who were low achievers in primary school drop out of secondary education more often than high achievers (Jensen & Jensen 2005). However, low achievement is also the result

of the characteristics of the school structures and routines - the learning environment (Rasmussen & Jensen 2014). On the level of concrete learning environments, which is the focus in this article, it is acknowledged that the school and the teachers' perceptions of the students result in different opportunities and challenges for different students. This shifts the center of attention away from an individualized and individualizing view of students. Our approach is to investigate the learning environments of schools and how schools can be enabled to overcome the pull, push and falling out tendencies and include students from all backgrounds. Such a view moves away from general benchmarks and tests as the only measures of quality in education (Gorur 2014). In the following, we introduce the concept of IBE and then we will present two empirical case studies.

Core ideas in Inquiry Based Education (IBE)

In order to fulfill the goal of equality in education, IBE is addressed as a possible way of designing inclusive learning environments where all youth have a fair chance to succeed in becoming democratic and innovative. Therefore, we start by (re)examining the core ideas and theoretical roots of Inquiry Based Education. IBE is both a learning approach and a teaching methodology that can be seen as a constructivist response to traditional forms of instruction. It has undergone a revival in different educational settings (Stephenson 2012), and this actualizes the theoretical questions on how to understand learning in an IBE framework.

Theoretically, IBE is strongly related to the work of Dewey (and Bruner) and to the notion of inquiry as a pedagogical concept. The core notion of IBE is to invite students to work with real life problems similar to how scientists work. The philosophy underlying this notion is that:

“... education should be for all, stimulate student’s interest for learning and cultivate their autonomy, aim at the formation of human beings able to play an active role in the development of societies, and reject traditional teaching practices focusing on instruction and drill (Artique & Blomhøj 2013: 798).

This implies an understanding of learning as taking place when participating in activities that allow for ‘learning by doing’ (Dewey 2007; Kilpatrick 1918). Thus, the philosophical foundation of IBE aims to form democratic competences and active citizenship. On a pedagogical level, it implies a blurring of the demarcation between teacher and student. It also implies a quite fundamental shift in the view of knowledge as something that is transmitted from a teacher to a learner, to the view that, fundamentally, knowledge is something that can be developed in communities and is based on thought, reflection, experimentation and science (Artique & Blomhøj 2013: 799; Barrow 2006). In this way, inquiry means that the students must be engaged in scientifically-oriented questions, and that these questions must be of interest to the students in order for them to develop ownership (Barrow 2016: 274). It follows that inquiry means both discovery and learning and implies both hands-on and ‘minds-on’ and ‘research-based disposition’ towards teaching and learning (Wenger 1998; Darling-Hammond 2004; Hattie 2005; Stephenson 2012).

There is a close connection to Lave & Wenger’s understanding of learning as being fundamentally linked to participation in relevant and meaningful settings. According to Lave & Wenger, learning is not just a cognitive process or the result of personal motivation, it is fundamentally linked to the social and cultural context and they emphasise that learning and knowledge is situated within the community of practice (Lave & Wenger 1991; Wenger 1998). The concept of IBE with its strong connection to Dewey and Lave & Wenger allows us to move away from the view of learning as being a matter of what we know, towards a view of learning as being a matter of what we are able to do with knowledge in different contexts² and how to create inclusive learning environments.

Based on the work of Dewey, the core educational question in IBE becomes a question about what types of activities in which the students should be engaged in order to acquire and develop scientific knowledge and democratic education. Based on the work

² This definition of knowledge is a simplification/polarization. For a more complex definition see for instance Nickols (2000)

of Lave & Wenger, it becomes essential that students are invited to participate meaningfully as knowledge producers in activities rather than being pacified as knowledge receivers. In this sense receiving and producing represents different levels of knowledge, also relating to the learning process of the student going from novice to expert (Lave & Wenger 1991). However, adopting an equality perspective implies that all students are made to feel that they are having given the opportunity to participate in the community of practice. Thus, IBE requires that the teacher takes responsibility for creating a learning environment where activities are organized with appropriate challenges to support and spur the individual student's motivation for discovery and inquiry in a shared community. This also means that students are expected to participate actively in studying and learning by conducting their own inquiries, thereby becoming partly responsible for their own learning. However, even though IBE in many ways can be seen as a kind of joint venture between teachers and students, the teacher is still the responsible facilitator who controls possible and desirable learning processes (Artique & Blomhøj 2013: 799).

Case study as a method to address the design of the learnings environment

The main object of the article is to observe and capture the complexity of the knowledge production and the student activity in the learning environment in two very different IBE contexts. The value and possible impact of the analyses produced in the article on a macro level and across the different learning environments is beyond the scope of the article and is only indicated. The selection of methods is informed by our use of theory and we focus on observations of interactions that occur in the physical space: the class room. We build on Stake (1995; 1998) and his definitions of the characteristics of case study and meaning making of experiences and observations within a bounded context. As researchers we have worked with observations guides and focused on what is common and what is particular about the different cases. This involves consideration of the physical setting, reflections on the communication and questions from both teachers and students, and other institutional and political contextual factors. But our observations focus' on the micro level and the design of the learning environment. With the qualitative based observations in classrooms, we give priority to the understanding of the complex structures of power and knowledge production in the

classroom (micro level), and thereby only briefly touch on the school structures (meso level) and the national educational policy impact (macro level).

The first case is a New York City High school, while the second is a Danish vocational education and training school. The point of introducing examples from two different nations is not to highlight specific differences in the national educational systems (macro level), but rather to understand similarities between educational approaches, pedagogical practice and students' opportunities for success and inclusion across nations and specific educational systems on the micro level. In the two cases, the teachers' settings and approaches are different, although some elements are the same. In both cases, the teachers create a learning environment where activities are organized so that they can spur the students' motivation for discovery and inquiry. However, this is done in different ways, as discussed in the following. Thus, the primary concern in the following analysis of the observations is to understand how the concept of IBE as a theoretical frame, can contribute to the inclusion of all students while respecting the individual students situated practice in the classroom and to reaching the goal of equality in education by giving all students the opportunity to become democratic, innovative.

History lesson in a NYC high school

The first example is based on observations in a NYC High School.³ The students attending the history class are aged between 16 and 22 years and are of mixed gender and race. The topic for discussion in the lesson is: 'Who or what is responsible for the end of legalised slavery in the USA?' Before the lesson, students had to read four texts by different historians who each offer their view on the topic. The teacher addresses the question and invites the students to present an argument that they find convincing. Three students present different arguments. The teacher acts as moderator and sums up the different arguments and invites other students to contribute. One student argues that the slaves themselves were the liberators, and that a legitimate part of their

³ Data for this example are from notes from observation studies in a class room and schedule plans gathered during a visit to the school in spring 2010. The school is a transfer high school in New York City. The school describes itself as a small school with big ideas. Although all students are drop outs from other high schools, almost all students continue to college. The school has discussion-based classes where every student's contribution is valued, regardless of their age or grade. All classes are ungraded (for more information and reflection see Louw & Jensen 2013).

liberation process was to kill their white oppressors. Another student argues that the white farmers were a product of their time and not necessarily bad people who should be killed. The teacher stresses that there is no right or wrong answer and asks the students to link their arguments to the different sources and views of the historians they have read. A student argues that if she and her family had been raped and starved, the right thing to do would be to kill their oppressors. Another student asks her how she feels about giving 'a license to kill'. The discussion moves on to the theme of whether killing is the right thing to do for the American soldiers in Iraq and Afghanistan. The teacher embraces this new theme, asking the class what can legitimize the killing of another person. This brings new energy to the discussion and the teacher continuously challenges the students to defend their points of view and find arguments in the texts they have read. At the end of the lesson, the teacher (supported by the students) sums up the various arguments and the process of the discussions, and outlines the context and the theme for the next lesson. Some students are not quite finished discussing and are still trying to make their point and defend their arguments, even though the teacher has stated it is time for a break (NYC High School, 2010).

Construction theory lesson in vocational education and training in Copenhagen

The second example is based on observations at a vocational educational (VET) school in Denmark in 2011.⁴ The students attending the class are aged between 16 and 30 years old, all male students and almost all Caucasian. The topic for discussion is: 'What does a carpenter need to know about construction when building a house? Before the lesson, the students have built small wooden cabins from manuals in the workshop. The students, therefore, have some practical experience, but as yet no theoretical experience. The teacher addresses the question while he takes the students for a walk in the neighborhood. The class stop to study houses on their way. The teacher uses specific carpentry words and language as he talks about some of the houses and their specific construction, and the challenges they present. The students are invited to

⁴ This study is part of a PhD project conducted by Louw (2013b). In this project, anthropologically inspired fieldwork was conducted whereby Louw enrolled as a carpentry student for five weeks and received teaching together with the regular students. The school is situated in a medium-sized provincial town on Zealand and offers 7 different basic courses. The class in question consisted of 25 male students. Data in this study consist of Louw's field notes, interviews with students and teachers and a variety of official school letters, documents and teaching material. The second case is based on data from this study.

reflect and ask questions and they are encouraged to combine the knowledge they have already gained from their experience with building the cabins with the new knowledge they have been given by the teacher. The teacher gives the students lots of time to address, reflect and question various constructions. Sometimes he asks them to review a building and asks questions that can only be answered by using their practical experience and the new knowledge about constructions - and by using language specific to the carpentry trade. The teacher's enthusiasm for the subject is clear and it rubs off on the students who seem attentive and curious. The teacher reprimands students, who disturb the group, but he keeps a positive attitude and almost all the students are attentive and engage in the process of observing, reflecting, questioning, finding problems and analysing the construction of the houses while using carpentry language. The fact that the knowledge and experience they gain is needed to complete the construction of their wooden cabins is obviously a motivating element (VET school, Copenhagen, 2011).

Analyzing IBE learning environments - levels of inquiry

In the example from the Danish VET school, the teacher seems to be rather instructional and possibly has a more detailed subject-orientated goal for the outcome of the session. There is a clear demarcation between the teacher's and the students' position. The students are positioned as knowledge receivers when the teacher shares his knowledge and experience regarding the different construction methods on the city walk. At first glance, this does not look much like IBE where students' role is to be active knowledge producers. In the example, the learning environment is similar to a traditional school setting where teacher-student relations are clearly demarcated without much opportunity for the students to *inquire* or construct knowledge. However, on closer examination it is not so straightforward. As previously mentioned, IBE is not a blueprint on how to teach but should be understood as a learning approach and a teaching methodology that can be adjusted to fit different contexts. Furthermore, even though IBE entails a blurring of the demarcation between teacher and students, it is essential to maintain the core educational objective which means that the teacher is ultimately responsible for the educational direction and for providing the students with the opportunity to progressively accumulate relevant knowledge. On a general level, this

often implies a more controlling teacher in the beginning of a training course. However, as the course progresses, the teacher can gradually give the students more responsibility.

This approach is also found in Banchi & Bell (2008) who develop the following analytical distinction between four levels of inquiry: confirmation, structured, guided and open inquiry. According to Banchi & Bell, the first and second level (confirmation and structured inquiry) provide the students with the questions and procedures and the students are seen mostly as knowledge receivers. These kinds of inquiry would make sense to draw on when, e.g. carpenter students are introduced to a new subject area like building the wooden cabins and learning about construction during the city walk. When introducing the new subject areas, the teacher reduces the complexity and outlines how to fulfill a task and what the desired results look like. In this phase, confirmation of the process and the results are the aim of the inquiry.

On the third and fourth level of inquiry (guided inquiry and open inquiry), the students create or are provided with a more or less completed research question and their task is to conduct research and find explanations. This positions the students as knowledge developers and the teacher as responsible for opening up complex *subject areas* for inquiry, which demands that the students have theoretical knowledge and practical experience regarding the subject matter. However, in the Danish example, the teacher provides the students with the opportunity to reflect when he suggests areas of inquiry which involve different professional content based on knowledge and experiences the students have gained during the basic course. This can be seen as a way of encouraging the students to progress and adopt more advanced levels of inquiry; levels three and four to put it in terms of Banchi & Bell's distinctions. Students are thus expected to reflect and actively participate in the inquiry. Therefore, the Danish example highlights that IBE implies different kinds of inquiry and requires the teacher to adopt different instructional approaches in different contexts and at different phases of the students' learning process.

Analyzing IBE learning environments – innovative and democratic elements

In both examples, the students are invited to participate meaningfully in the activity based on their previous experience from reading texts or from building cabins and the students are at some point positioned as knowledge developers in both examples. However, the teachers' and the students' positions are slightly different in the two examples. In the following, we highlight the significant aspects of the teacher - student engagement in learning activities when the goal is to develop innovative and democratic mindsets, based on the example from NYC.

In the NYC example, the students are invited to construct knowledge based on valid arguments they are able to bring to the discussion. The teacher is careful to support these constructions by letting the students know that there is no ultimate right or wrong answer, but rather it comes down to the good argument and how it is defended in discussion. This does not imply that anything goes, or that the teacher does not have a plan for the students' learning processes and progression. However, it does imply that the students are given the opportunity to participate in responsible and meaningful ways based on their textbook readings. This blurring of the demarcation between teacher and student is, as mentioned, one of the core ideas of IBE, and the example from NYC underlines how this might support the students' motivation for participation in knowledge construction without losing the academic objective of the lesson. The students are given the chance to defend different arguments in meaningful ways and the students' involvement in the example underlines how this also develops student ownership of the discussion regarding the societal dilemma presented by the teacher. In line with IBE, the learning environment is organized to provide appropriate challenges to support and spur the individual student's motivation for discovery and inquiry in a shared community.

Thus, in both the Danish example and the example from NYC, the students are expected to actively participate in the activity by conducting their own inquiries, thereby becoming responsible for their own learning and knowledge construction to some degree. In the NYC example, the teacher positions himself as a facilitator who helps the students construct their arguments and encourages them to listen to and respect the

other students' points of view. There is a high degree of subject complexity and a focus on a democratic mind set. In the Danish example, the teacher positions himself more directly in the center of the activity and maintains strong control of the communication (Bernstein 2000). However, at the same time, the teacher gradually opens up for subject complexity and encourages the students to make professional reflections about the different construction methods of the city houses and relates this to their work in the workshop. With a positive attitude and an open mind, the teacher establishes an inclusive learning environment for all the students in his class, encouraging them to think creatively when reflecting on the different constructions of the houses (see also Louw 2013a for a thorough discussion of the teacher's role in *direct and indirect teacher approaches*).

Analyzing IBE learning environments – inclusion and equality in education

In the following, we discuss the potential for student learning and the extent of student inclusion in the two examples.

The students at the NYC high school are active participants in the discussion about freedom, the justice system and the social impact on the individual citizen. The texts which the students read before the lesson are brought to life in the discussions so that the students are given the opportunity not just to learn about their country's history, but also to learn about how history can be analyzed and understood differently according to different theoretical and political perspectives. The inquiry is facilitated by the teacher with respect for arguments, listening and reflection, which can be interpreted as supporting the students' democratic understanding and their ability to appreciate the complexity of power relations and policy in societies. The teacher does not evaluate or dismiss the students' contributions as being either right or wrong. Instead he deliberately chooses to encourage the students to defend their arguments based on the texts and their opinions and personal thoughts. This supports the democratic education of the students and creates an inclusive learning environment for all the students in the class. These aspects are all central to the IBE approach to education.

If we leave the issue of democratic education and examine the learning environment in the classroom, one might argue that right or wrong judgments are still applied during the discussion in that some arguments are encouraged, while others are not. The facilitator decides which avenues for discussion to follow and behind such choices there will always be some sort of value judgment (Bernstein 2003; Ulriksen 1997). This fact highlights the important issue of how the teacher frames the learning activities. Following Bourdieu's thinking, it is worth stressing the point that the educational system has a tendency to reproduce existing power relations in society, where middle-class norms and culture are dominant (Bourdieu 2000). In line with Bourdieu's thinking, Bernstein, in his later work, developed concepts and models that transform relations of power and control into pedagogical codes, and pedagogical modalities (Bernstein 1977; 2003; Sadovnik 2001). In this work, the terms classification and framing are constructed on a scale from weak to strong, which facilitates the analysis of different forms of learning environment. Classification conceptualizes relations of power that regulate relations between contexts or categories, while framing conceptualizes relations of control within these contexts or categories. Using these terms, the analytical focus is on how organizational structures, social relations and dynamics in the classroom are reflected in certain forms of pedagogy. Bernstein (2003) introduces the concepts of visible and invisible pedagogy that may be of interest for further research on the subject matter of this article. Within the context of Bernstein's theory, the invisible pedagogy is present when the classification and framing are weak, which allows the students to be innovative and participate on many levels in the educational setting. However, it can also contribute to a pedagogic practice, where the students are measured by standards of which they have not been made aware. For example, the teacher deciding to encourage one argument instead of another may be due to how a particular student has addressed and presented a certain problem. Here the student's prior knowledge and skill in expressing himself in ways that catch the teacher's attention is important. So, on the one hand, students who are able to adopt the language and phrases appropriate in the school context have some advantages and might therefore feel more comfortable in an IBE classroom setting. On the other hand, an IBE learning environment opens up for many different approaches and experiences with joint classroom knowledge building which gives all students the opportunity to participate.

The NYC high school trains not only the teacher, but also the students to be facilitators of discussions. This may indicate that the school is aware of the possible bias in the facilitator's position and that they are attempting to make possible invisible pedagogy visible to all students. The analysis of the example from the NYC high school indicates a close relationship to the ideas of the IBE framework and its essential aim of creating an inclusive learning environment for all students where the students are seen as knowledge producers. The school is a transfer school for students who have dropped out of high school in NYC, and over 90 % of their students continue to college.

The example from the Danish VET School is slightly different and is chosen in order to highlight other essential aspects of the students' learning and how an inclusive learning environment, understood in an IBE framework, is not fixed in form, but may vary in different learning contexts. As mentioned earlier, the VET students in the Danish example seem to be positioned as passive receivers of knowledge rather than active constructors of knowledge based on working with real life problems. The teacher takes center stage and controls the dialog by asking the students randomly about different aspects of the houses that they pass in the neighborhood.

The research in VET stresses the point that the students are in general struggling to connect theory and practice (Aarkrog 2007; Nielsen 2004, 2009; Jørgensen 2010). This is especially evident for students on the VET basic courses. In order for the students to be able to make such connections, it is important to provide learning opportunities which clarify the relevance of more general, theoretical reflections. By taking the students on a walk past real houses and connecting questions about their construction with the students' practical work in the workshop, it seems that the teacher is trying to establish such opportunities for connecting theory and practice. Even though the teacher initiates the dialogue and maintains strong control, space for the student to reflect is still opened up. Within the IBE framework, this can be understood as one way of connecting real life problems with students' work and stimulating the students' interest in learning about, e.g. construction. Furthermore, as previously mentioned, IBE means both discovery and learning and implies both hands-on' and 'minds-on' and a 'research-based

disposition' towards teaching and learning. In the Danish example, it is mainly the minds-on aspect that is addressed. Thus, this type of activity provides the students with opportunities to acquire and develop scientific knowledge and reflective competencies, which is a core aspect of the approach to learning that is imbedded in IBE.

Finally, in the Danish example, we draw attention to what is important in relation to the inclusion of all students in a shared learning environment. Without knowing a lot about the students' backgrounds, the teacher takes a starting point in what he knows the students have been working with on the basic course. With a clear focus on the professional progression of the students, the teacher asks them to reflect upon the construction of the city houses they pass. By linking these reflections to the work the students are doing at the moment in the workshop, and by giving an immediate evaluation of the students' answers as well as providing his own reflections on the matter, the teacher gives the students the opportunity to develop a professional identification and to be included in the community of practice that is the carpentry profession. Inclusion in the learning environment in the example is thus based on the students' ability and willingness to engage in this activity; something that is not based on social class, but on the students' previous work in the workshop so that it is at least somewhat accessible to all the students regardless of their backgrounds. From a democratic point of view, this type of learning environment supports the notion that all students should have an equal opportunity to participate and be included in learning opportunities.

Thus, both cases were chosen in order to highlight essential aspects of the IBE approach where students are seen as knowledge producers and the learning environment is inclusive and supports the students' democratic education. We find these elements essential when attempting to fulfil the goal of equality in education.

Conclusion

In this article, we have explored how to improve equality in education so that all young people have the chance to become successful democratic educated students with educational skills that enable them to become flexible, contributive workers and

employers in the globalized world. We have explored Inquiry Based Education (IBE) as a theoretical and empirical approach to understanding how to create such inclusive learning environments. In a student perspective, IBE is linked to the understanding of learning as taking place when participating in activities that facilitate 'learning by doing' and to the view that learning is not a matter of what we know, but what we are able to do with knowledge in different contexts. Thus, in IBE it is essential that the students are invited to participate meaningfully in the activities as knowledge developers, rather than being pacified as knowledge receivers.

Based on the analysis in the examples, it can be concluded that in some ways IBE does in fact offer a learning approach that contributes to greater inclusion and equality in education. However, there are still questions that need to be asked. It may be argued that IBE is 'just another' pedagogical method that favors middle-class norms and culture. Seen through the lens of Bernstein's theory of classification and framing, IBE allows the students to be innovative and participate on many levels in the educational setting, but the students may be measured against standards that they are unaware of. When the teacher facilitates a discussion and chooses to encourage one argument instead of another, it may be due to the student's ability to address a certain problem in a certain way. Here the student's prior knowledge and skill in expressing himself in ways that catch the teacher's attention is important. Students with a middle-class background may have an advantage when it comes to using language and phrases that are appropriate in the school context which may make them feel more comfortable in an IBE classroom setting. However, it is argued here that working explicitly with IBE and the design of inclusive learning environments where invisible criteria are made visible to the students may provide all students with better opportunity to participate and contribute with their different experiences and knowledge based on their concrete school work, regardless of social class and norms. Therefore, we suggest that middle-class students are not particularly favored in such IBE-inspired learning environments.

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