Direct Instruction vs. Inquiry Based Learning

“All children have the right to a high quality education” but which is the best way to teach today’s students, in a society where technology is getting faster and faster. The world is constantly changing, and so has education, specifically the way in today’s children being taught (O’Brien & Guiney, 2001. pp. 11, 12).

There are many educators, theorists and psychologists who think they have the best methods to teach the students, but which way is best?

The two areas of teaching and learning that will be discussed in this paper are direct instruction and inquiry based learning. It will cover what each teaching method is, their similarities and differences and their positive and negative effects. The investigation will also create links to aspects of teaching and learning, the curriculum, and its effects on graduate teachers.

Mayer (2008) describes direct instruction as “the teacher’s construction of environments for the student where such environments are intended to foster changes in the learners knowledge” (p. 7; Skinner, 2010, p. 35). The approach is teacher centred as they are in control of delivering the academic content as the students ‘absorb the content’ (Killen, 2009, p. 102; Skinner, 2010, p. 35; Whitton, Sinclair, Barker, Nanlohy & Nosworthy, 2004, p. 97).

The most common forms of direct instruction are “lectures, demonstrations” (Killen, 2007, p. 102).

There are four stages of direct instruction “explaining, demonstrating, modelling” and ‘guidance’; for example lessons where teachers explain the content then students go off and complete activities designed and explained by the teacher (Skinner, 2010, p. 36, 38; Mayer, 2008, p. 7; Cohen, 2008, p.3).

The effective teaching of direct instruction requires teachers to use learning outcomes effectively, by having them clearly set during each lesson. The teacher manages time effectively for “various instructional activities”, and “monitors students” as they complete them. The lessons have a strong
“emphasis on academic achievement” and feedback is always reflective (Killen, 2007, p. 102; Jarolimek & Foster, 1997, p. 170).

Inquiry is a teaching model where the student is at the centre as well as the aim. A method of seeking information about something you don’t know (Parker, 2007, p. 1; Cohen, 2008, p. 5; Harlen., Macro., Reed & Schilling, 2003, p. 3; Skinner, 2010, p. 68, 76). Inquiry is generally based around the students’ interests and is then scaffolded by the teacher, as they are the facilitator of their learning and the providers of the resources for their learning (Walker & Bass, 2011, pp. 3, 4; Cohen, 2008, p. 5; Killen, 2007, p. 212; Australian Institute for Teaching and School Leadership [AITSL], 2012; Nash, 2009, p. 69). The teacher must have in depth “careful planning” to engage students in active learning and provide them with opportunities to explore many processes in their learning (Parker, 2007, p. 9; Walker & Bass, 2011, p. 29; Nash, 2009, p.69). Inquiry teaches children how to learn and how they learn best, so that they can go out into the world and constantly learn (Walker & Bass, 2011, p. 3; Harlen et al., 2003, p. 3).

Inquiry has two main aims “to develop subject knowledge and to how to inquire”, this generally takes place through investigations, discovery or cooperative learning (Skinner, 2010, p. 68; Whitton et al., 2004, p. 97).

The differences and similarities between direct instruction and inquiry based learning are pretty vast as direct instruction is very explicit and the learning experiences are mostly planned by the teacher, and the outcome is generally the same for each student. Whereas the inquiry approach is student centred where the teacher plans around each student and has everything available for each child to have the best opportunity to engage in their best learning (Walker & Bass, 2011, p.14; Parker, 2007, p.7).

Assessment is something that can be different for the two teaching models as inquiry learning takes on an ongoing view of assessment; teachers are often observing, gathering evidence, documenting and tracking each of their students (Walker & Bass, 2011, p. 66). A lot of the assessment is reflective and often completed by the students as it takes the holistic approach rather than testing each student on the
same thing once a year. Assessment is informative (assessment for learning) and views the child in a meaningful way, which is helpful to the teacher; rather than a pass fail system (Walker & Bass, 2011, pp. 66, 67). Whereas direct instruction assessment is somewhat summative based and tests students on the same thing as it assumes “students are all ready and should be ready to learn the same thing at the same time in the same way” (Walker & Bass, 2011, p. 66).

Some similarities between the two models are based on the amount of planning, as they both require in depth planning of lessons and appropriate opportunities for learning to occur (Parker, 2007, p. 7; Jarolimek & Foster, 1997, p. 170). Both models require assessment to occur throughout and after the learning has occurred to ensure for effective teaching practise and the aims of both require the student to be the purpose of the learning (Cohen, 2008, p. 4).

However both models have been criticized for different things over the years and have each been noted for benefits and disadvantages that need to be taken into account by the teacher.

Cohen (2008) argues that direct instruction has been promoted as providing large amounts of information in short periods of time, however by doing this students take on a very ”passive role” as they take in this information, rather than engaging with it (p. 3). Cohen (2008) goes on to say that “direct instruction allows for accelerated learning as it eliminates misconceptions that occur in the learning process” (p. 4). This method of teaching and learning is therefore effective as it allows students to learn the content by being explicit and sequential. This also suggests that the teacher is teaching the correct components of the curriculum as each lesson focuses on “small units” in an orderly way, making a check and balance system within the classroom. As teachers often need to teach students about difficult concepts that students may not discover when on their own (Cohen, 2008, p. 4; Killen, 2009, p. 103; Jarolimek & Foster, 1997, p. 170).

Killen (2009) argues that direct instruction allows for students who suffer from learning difficulties as it explicitly teaches what students need to be taught (p. 104). It offers a non threatening environment as “students are not forced to participate” if they don’t feel comfortable. Students who suffer from
“poor reading” are aided by the use of lectures as students don’t have to “locate, organise or interpreting the information” (p. 104).

However Killen (2007) suggests that direct instruction has “limitations” as it ‘heavily relies on the teacher’s knowledge, confidence, enthusiasm, organisation and communication skills’ (p. 105). This may lead to students becoming bored and unmotivated to learn as they may not benefit from this style of teaching or the teacher may not be highly effective in all of these areas (Killen, 2007, p. 105; Oakes & Lipton, 2007, p. 184).

Inquiry based learning offers both negative and positive affects through its education of children. Many believe that inquiry learning is where students are able to do what they like, however this learning style gives students more input into what and how they are learning. Students are guided by their teachers and are able to formulate and test hypotheses, they can engage more deeply in their learning as they are motivated and eager to learn (Cohen, 2008, p. 5; Nash, 2009, p. 69). Cohen (2008) argues that inquiry learning “allows students’ to solve authentic problems in rich settings”, thus allowing them to make deep and meaningful connections to what they are learning, and use them in the future (p. 5; Walker & Bass, 2011, pp. 4, 14; Killen, 2007, p. 211).

Killen (2007) argues that inquiry learning allows students to feel more active and engaged during their learning, it enables them to become more critical as they can “adapt to new learning situations” (p. 211; Oakes & Lipton, 2007, p. 184; Nash, 2009, p. 69). Students become more reflective and responsible for their learning as they are in charge of what and how they are learning (Killen, 2007, p. 211). It also encourages group work and promotes students to learn new skills and “qualities” which they can use in everyday life, such as “resourcefulness, independence, confidence, patience and tenacity” (Killen, 2007, p. 212).

Some limitations to inquiry learning include the extensive planning and time required to maintain effective learning experiences, students may not learn what the teacher wants them to as they may go off track and learn other things (Killen, 2007, p. 212). Students may not find “problem solving
relevant” in which case they may become bored or will just play with the resources made available (Killen, 2007, p. 213).

Graduate teachers in today’s new teaching age have to have a sound knowledge of these two teaching approaches, so that they can best know when and how to use them effectively.

The “effective teachers is one who maximises the achievements of students in accordance with an explicit set of principles that have order coherence and relevance to the...context” (Killen, 2007, p. 3). Therefore an effective graduate teacher would have to know their students very well; their needs, interests and styles of learning (Gregory & Chapman, 2007, pp. 1, 2; Cowdery, Ingling, Morrow & Wilson, 2007, p. 175; Australian Assessment and Reporting Authority [ACARA], 2013; Nash, 22009, p. 69). Each child has different strengths and weaknesses, different prior knowledge and attitudes towards their learning. These things need to be catered for when thinking about how to teach your new class each year (Gregory & Chapman, 2007, p. 3). Therefore it would be far more effective to use both teaching methods (direct instruction and inquiry based learning) to create a highly effective teaching and learning environment. This would cater for diversity within the classroom, engage and motivate students to have a lifelong love of learning as they can be actively involved in their own learning, and at other times require the structure and support from more direct approaches (ACARA, 2013; Gregory & Chapman, 2007, pp. 1, 3; Cowdery et al., 2007, p. 175, Killen, 2007, p. 3).

Therefore throughout this investigation it has been discovered that both teaching models both have their strengths and weaknesses in relation to both teaching and learning. Both approaches have similarities as they both require in depth planning teaching the current curriculum and they require assessment in order to ensure learning is occurring (Parker, 2007, p. 7; Jarolimek & Foster, 1997, p. 170; Cohen, 2008, p. 4). Each model has their own distinct method of teaching; however it is up to the teacher how they incorporate both models into their everyday teaching. As research suggests that today’s classrooms need to cater for the needs of all children, in order for effective and meaningful learning to occur (ACARA, 2013; Gregory & Chapman, 2007, pp. 1, 3; Cowdery et al., 2007, p. 175, Killen, 2007, p. 3).
References


