

Views of gifted primary students about self-directed learning

Dr Penny Van Deur
Flinders University,
Adelaide, Australia

Penny.vandeur@flinders.edu.au

Self-Directed Learning for gifted students

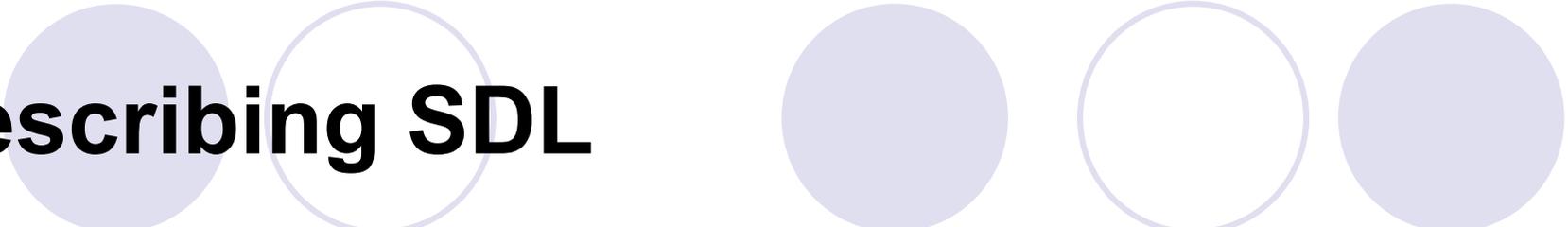
- *The development of skills that increase independent learning has been recognised as an essential element in the education of the gifted* (Karnes & Stephens, 2008, p. 186).
- Karnes and Stephens (2008) discussed independent learning and gifted students and concluded that in schools the process of becoming more self-managing and confident in implementing independent projects is often neglected.
- Ideally gifted students should be motivated to learn about topics studied at school and then continue to pursue their interest in the topic out-of school (Pugh & Bergin, 2005).
- Teachers can support gifted students' knowledge about self-directed learning.



Gifted students' views on SDL

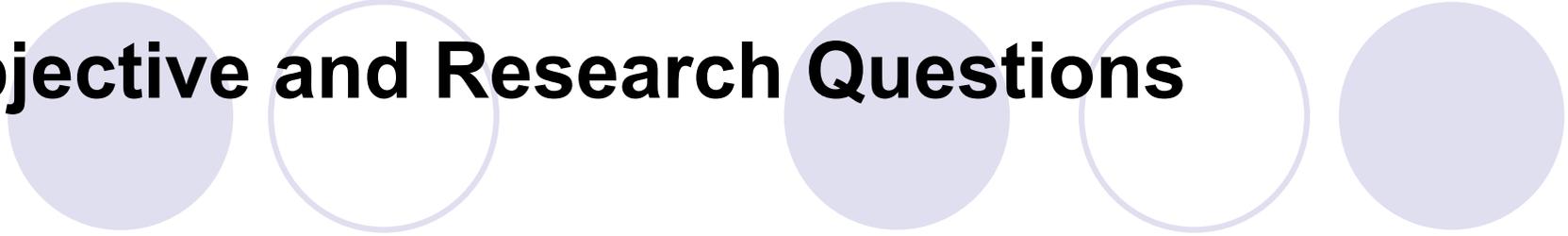
- Gifted students' views about SDL are examined in this study because these beliefs influence the way students interpret tasks, establish goals, attend to information, and employ strategies to work on inquiry activities (Butler & Winne, 1995).

Describing SDL



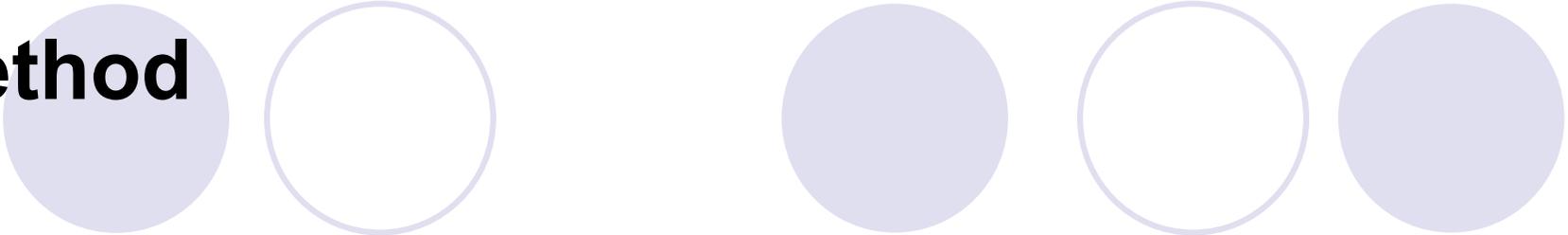
- Treffinger (1975) described SDL for gifted students as critical and creative thinking, problem solving, and evaluative thinking, as well as attitudes toward learning.
- Students can be taught how to take control of their own thought and feeling processes by learning how to plan what they want to learn, monitoring progress, and evaluating results (Barrell, 1995).
- Self-assessment requires that students learn to understand themselves better as they think about their knowledge, and gain an insight into ways they learn best.

Objective and Research Questions



- The main objective of the study was to examine gifted primary students' views of self-directed learning.
- Specific research questions:
 - RQ 1. How do gifted primary students describe SDL (knowledge and process)?
 - RQ 2. What are the attitudes to SDL of gifted students?
 - RQ 3. Are there differences in gifted students' views of SDL related to whether it is carried out at school or out-of-school?

Method

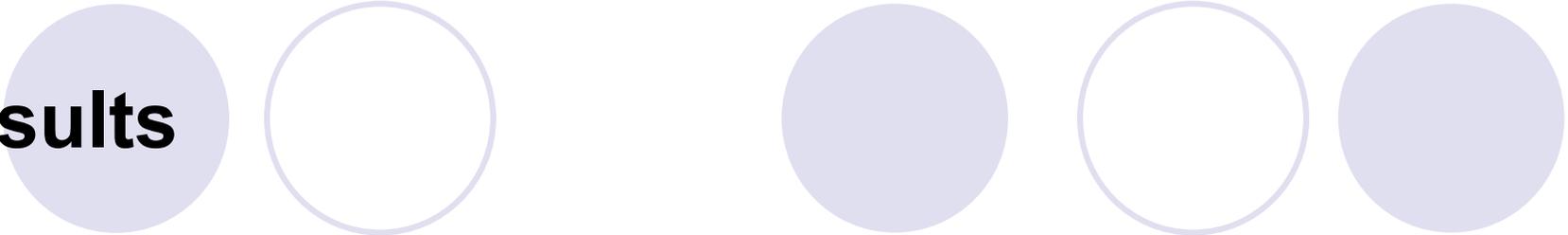


- ***Interview Participants***
- 10 students (in years four and five)
- -identified as gifted students on school-based assessments using *Slosson Intelligence Test Primary* (Erford, Vitali & Slosson, 1999).
- 6 boys (mean IQ 151.7)
- 4 girls (mean IQ 143.7).
- The students had a mean age of 10.8 years.

Semi-structured interviews

(22 questions)

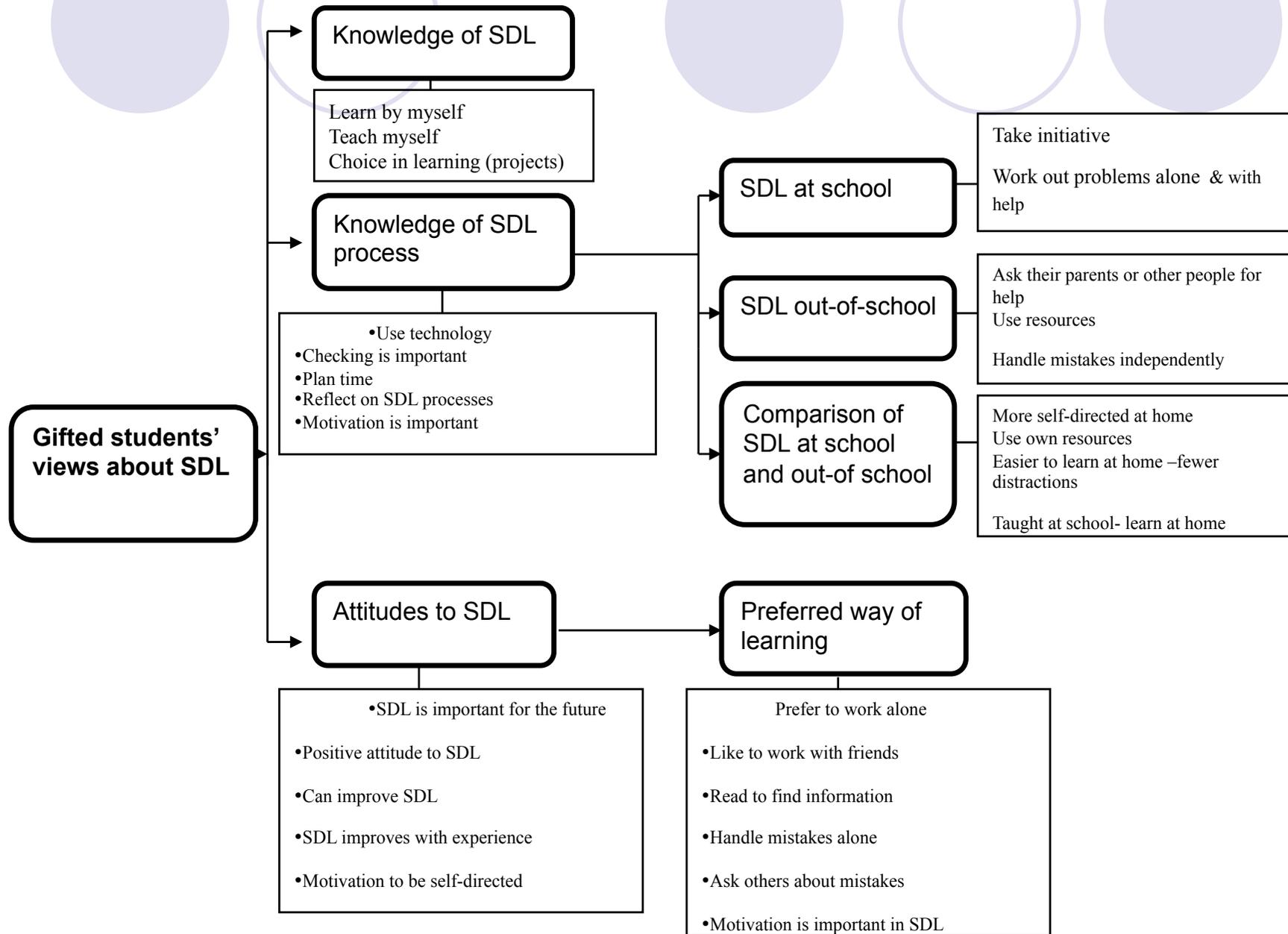
- Interviews about Self-Directed Learning were developed in order to gather information from gifted primary students about their knowledge and beliefs related to SDL.
- Themes covered in interview:
 - knowledge of SDL and process of SDL
 - attitudes of the students to SDL
 - explanations of SDL at school and out-of-school.
- **Data analyses**
 - The responses were recorded on audio-tape and transcribed using each student's ID code.
 - Themes were mapped to show interconnections between them (Thomas, 2009) and quotations are used to illustrate each one.



Results

- The responses to the interview indicated that gifted students have detailed knowledge of SDL and the SDL process.
- Gifted students' views:
 - -initiative determines SDL
 - -motivation is important
 - -handle mistakes alone or seek help

Theme Map: Gifted students' views about SDL





Themes

1: Knowledge of self-directed learning

- Gifted students described self-directed learning in terms of learning by yourself.
- *I think it's about where somebody if they want to learn something they will go on their own path and do it instead of getting help or something.*
- All gifted students agreed that they were self-directed on some activities with most of the students mentioning being good at being self-directed on projects.
- *Um yeah... Projects...Probably because its much more free-er because say you are working on the topic and you use the internet or look in the book. You've got more choice.*

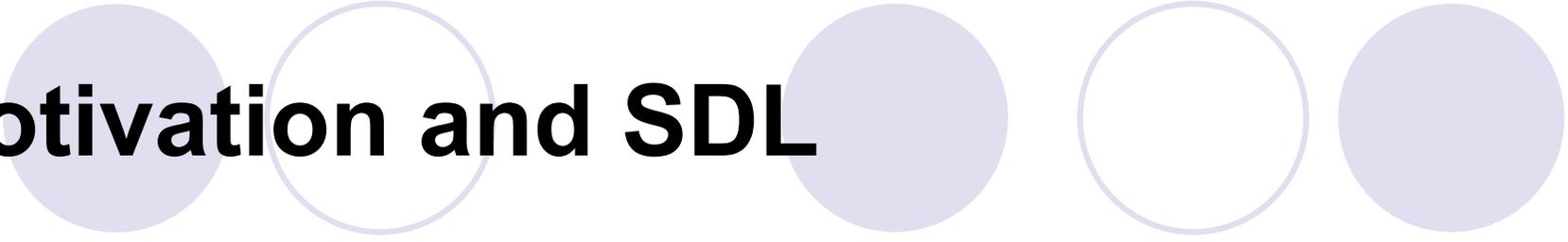
2. Knowledge of the SDL process

- Most gifted students said they would learn about something by thinking and asking questions as well as using resources such as the computer, encyclopedia, reading books, and looking for information on the internet (inquiry).

I think they would because you would have to like one day read some books and find some information and like next day you go on the internet and yeah.

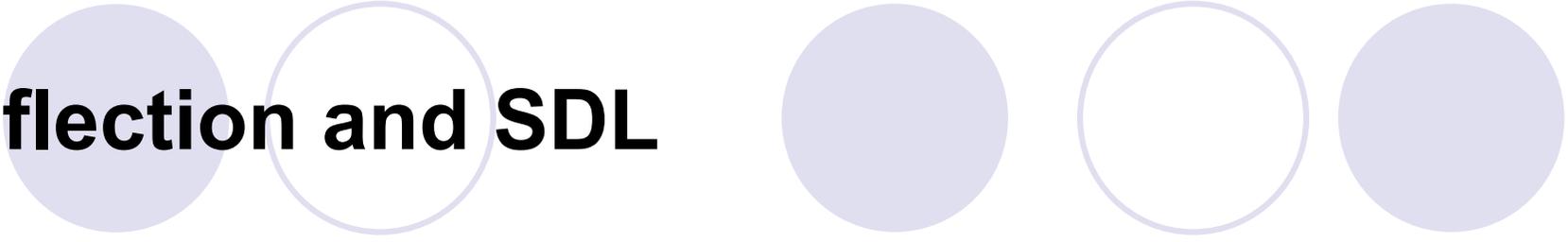
- Strategies for being self-directed in learning included actions such as teaching yourself a strategy, trying to figure out an answer, and setting goals.
- *You'd be talking about it, you'd be thinking it through probably writing it down and once you'd finished thinking about it you put all your ideas together and create what really is what you were learning.*

Motivation and SDL



- All of the gifted students were able to suggest ways they could get better at self-directed learning with most saying they could get better at self-directed learning by wanting to learn and encouraging themselves.
- *Encouraging yourself and saying to your mum if I ask you this just don't tell me what it is 'cos I want to be self-directed and things like that.*

Reflection and SDL



- Most gifted students would reflect on what they did when learning about a topic and the process of learning about it.
- *I usually think about what I could have done and what mistakes I made. Often I think well I could have done this better.*
- They would reflect by thinking about mistakes and thinking about what was done and how that could be used on subsequent learning.
- *Yeah and then you can use that sequence that you worked well in to do something else properly.*



3: **Self-Directed Learning at school**

- **At school** a self-directed learner takes initiative and works out problems alone and then gets help.
- *First you try to work it out first but if you can't work it out then you get a friend to help.*

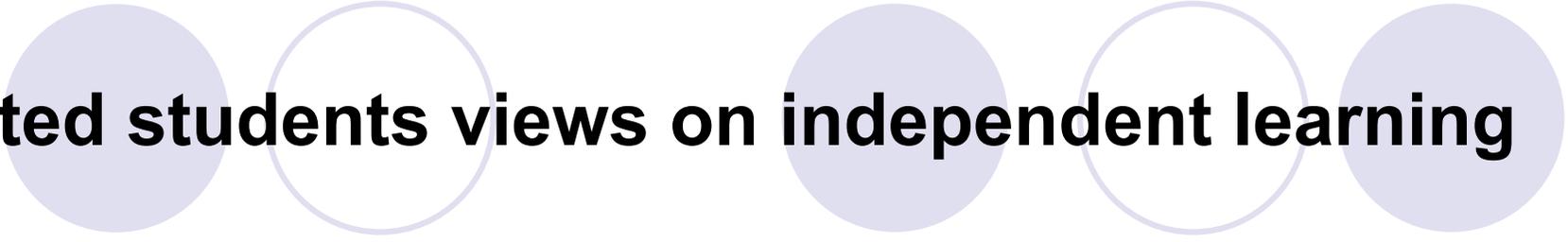
- Most students mentioned asking the teacher for help or asking another person for help.
- *I think you could probably look it up. Look it up on the internet or maybe go to the library or you could ask your teacher, yeah you could.*

Working out how to do things out-of-school

- Gifted students placed a strong emphasis on asking their parents or other people to help work out what to do.
- Emphasis on using resources such as the library, the internet and reading books.
- *You can go to the library, at the public library, go on your home internet thing, you can ask your parents maybe, just ask people.*

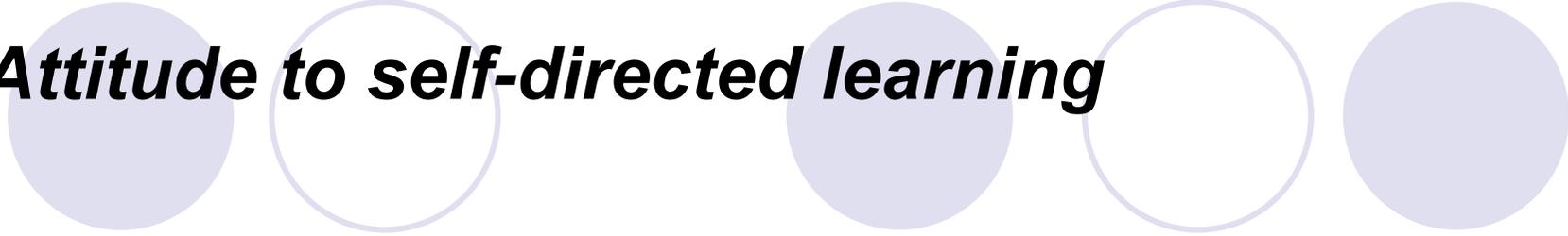
Comparison of self-directed learning at school and out-of-school

- There were differences in the way gifted students said they would learn about things at school from at home.
- *At school:*
- *...working alone, being directed by the teacher, having more resources at school, school being more focused on learning, being dependent on other people, having to do things, and having a big library.*
- *I think there is a big difference because in the classroom there's thirty other people and at home sometimes there's just either you or two or three other people. Probably be a lot easier to concentrate.*
- *At home:*
- *At home mainly. Probably because I like to learn about that stuff. I just normally just get taught at school and I normally just learn that stuff at home.*



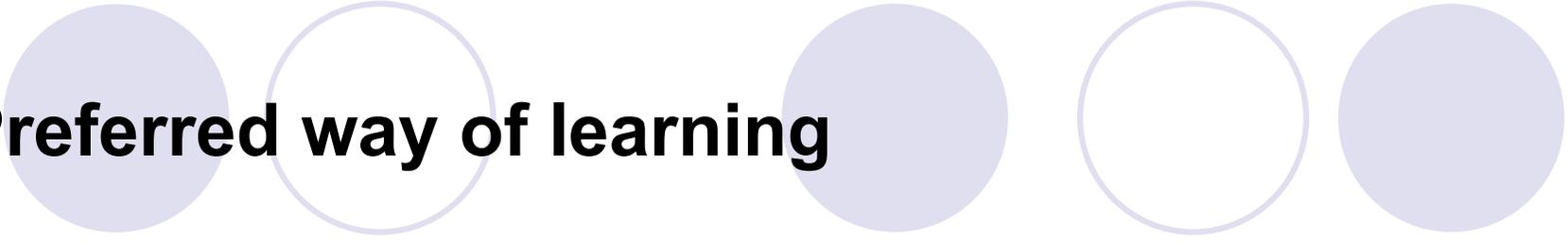
Gifted students views on independent learning

- Gifted students worked more independently at home than at school
- *Yes because normally at school you're directed by your teacher to what you are actually learning but at home you um think for yourself on a project it's partly directed by your teacher say in homework but you use your own brain to find it out like your own resources.*
- At home they had an independent view of handling mistakes and would fix or correct them.
- *Um probably you try and correct it you know, don't cry over spilt milk but you just work out what the mistake was and fix it.*



4. ***Attitude to self-directed learning***

- All of the gifted students said that they believed that they could get better at being self-directed.
- *Yeah you just need to encourage yourself more and say I can do this instead of saying I can't. I have improved.*
- Nine of the students said they were improving in being self-directed- Experience in SDL was mentioned as a way of improving.
- *You can get better by starting to do things by yourself and once you've done one thing try another one and then a few more and then after that you definitely become a self-director. I'm much better than at the beginning of the year.*



5. Preferred way of learning

- Most of the gifted students said that they would prefer to find out about something by asking friends but would try to do things on their own first.
- *Well I usually work stuff out for myself at home and friends help me.*
- Half of the students included reading in their explanation of the way they like to learn.
- *I actually like to read books and learn stuff*



Discussion

- The results of this small study suggest that gifted primary students have explicit knowledge about Self-Directed Learning
- *-SDL is teaching or learning by yourself through asking questions*
- And the SDL process
 - *working out problems alone or with friends*
 - *checking work*
 - *planning time*
 - *and reflecting on the SDL process.*

Gifted students had positive attitudes to SDL

- These gifted students emphasised motivation in their comments about encouraging themselves to improve at SDL.
- They had a more social view of SDL than is suggested in the literature.
- While the students described SDL as applying to activities in school and out-of-school, they indicated that they viewed themselves as being more self-directed out-of-school.



Implications for teachers of gifted students

- In 1975 Treffinger outlined a plan for teachers to develop SDL for gifted elementary students and suggested that all children will learn better if they are involved in their learning and that this will make them more motivated to learn and accept responsibility for their own learning (Treffinger, 1993).
- This is particularly important for gifted students who need to know about themselves as learners and the process of SDL.
- Gifted students need to see school as a place where they can learn more about SDL and be able to carry out independent inquiry.



Gifted students and SDL at school

- Ideally gifted students should be motivated to learn about topics studied at school and then continue to pursue their interest in the topic out-of-school (Pugh & Bergin, 2005).
- Importantly, as teachers of gifted students in primary schools we should ask:
 - *Are we giving gifted primary students the opportunity to carry out inquiry at school?*
 - *Are we teaching them what they need to know to be independent or self-directed learners?*
 - *Are we stimulating them to want to pursue their interest in topics studied at school?*

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