

Graduate Student Research Day 2011

Florida Atlantic University

COLLEGE OF EDUCATION

Fostering Self-Directed Learning in Adolescents Through E-Learning

Lauren Wanger and Daniel Reyes-Guerra

Department of Educational Leadership and Research Methodology, College of Education, Florida Atlantic University, Davie, FL

Despite the large body of literature on self-directed learning and readiness for this type of learning in adulthood, little research exists on its effects on adolescents. It has been stated that an individual needs a high level of readiness for self-directed learning in order to be successful in e-learning environments. The overall consensus is that in order to take classes in a virtual setting, as opposed to the traditional face-to-face model, one must have some self-directed learning readiness, which according to literature, is something acquired in adulthood. This study proposes that self-directed learning may be fostered at an earlier age if blended learning models are implemented at the elementary school levels and continued through the middle and high school grades. Qualitative observational data; interviews with students; and quantitative survey data is being designed to study the relationship between readiness for self-directed learning in students who take virtual classes at the high school level. While data is still being collected over a period of time to study whether self-directed readiness increases with access to more virtual learning, preliminary findings suggest that when students are exposed to taking classes online they develop an increased readiness for self-directed learning at an earlier age that may possibly effect their learning in adulthood.

FOSTERING SELF-DIRECTED LEARNING IN ADOLESCENTS THROUGH E-LEARNING

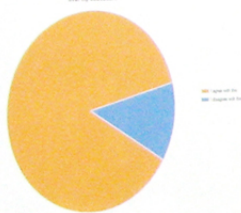
By: Lauren Wanger-Hernandez



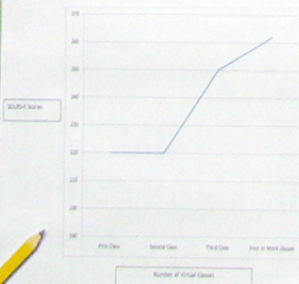
Number of Virtual Classes Taken

Initial Survey

How Many Virtual Classes Did You Take?



Pilot Study



Introduction

The concept of self-directed learning has long fascinated researchers in the field of learning for quite some time. Becoming a self-directed learner is found to be most important as we develop into adults. It is often cited as being one of the most important functions of education. However, research has shown that there needs to be a readiness for self-directed learning that comes with maturity. One of the key pieces of research states that self-directedness increases as we mature. Kewes (1980, 1985). Kewes defines self-directed learning "as a process in which the learner, with or without the help of others, identifies learning needs, defines learning goals, develops and implements a learning plan, and evaluates the learning gained (1975).

Those with "high-levels of readiness for self-direction in learning, have been labeled with high levels of performance in the workplace" (Engelstein and Engelstein, 2003).

While adults vary in their readiness for self-directed learning that seems to be needed for success in the movement in which we live, adolescents are less ready for this type of learning. As previously mentioned, self-directed learning is one of the primary functions of education. Providing 21st century skills is also a primary goal of education. There is a definite connection between preparing learners to become self-directed as they mature and providing learners with 21st century skills. They both can be achieved through e-learning. In addition, the relationship between e-learning and self-directed learning is critical. In order to be a successful e-learner, one must also have some self-directed learning abilities.

Abstract

Despite the large body of literature on self-directed learning and readiness for this type of learning in adulthood, less research exists on its effects in adolescents in e-learning environments. It has been stated by Engelstein and Engelstein that an individual needs a high level of readiness for self-directed learning in order to be successful in a learning environment. Engelstein and Engelstein explain that in order to take classes in a virtual setting, as opposed to the traditional face-to-face model, one must have some self-directed learning readiness, which according to literature, is something acquired in adulthood. The purpose of this study is to evaluate whether self-directed learning can be fostered in adolescents who take virtual classes through blended learning programs implemented at the elementary school level and continued through the middle and high school grades. In a pilot study, qualitative observational data, interviews with students, and quantitative survey data is being designed to study the relationship between readiness for self-directed learning in students who take virtual classes in the high school level. While data is still being collected over a period of time to study whether self-directed readiness increases with access to more virtual learning, preliminary data using the Self-Directed Learning Readiness Scale for Elementary Students (SDLES-E) (also known as the Learning Performance Assessment) suggests that when students are exposed to taking classes online they develop an increased readiness for self-directed learning as an adult age that may possibly offset their learning in adulthood.



Instrument & Design

Students will be given the Self-Directed Learning Readiness Scale for elementary students (SDLES-E). This scale has been used in a number of studies that support its reliability and validity for nearly 20 years, and was created by Dr. A. Engelstein, an expert in the field of self-directed learning. The SDLES-E is a questionnaire that can be completed by students in approximately 20 minutes and contains 100 items that are designed to measure the complexity of attitudes, skills, and characteristics that comprise an individual's current level of readiness in response to a set of learning Engelstein, 1975.

1. I enjoy taking virtual classes.	1	2	3	4	5
2. I am not sure about taking virtual classes.	1	2	3	4	5
3. I like taking virtual classes.	1	2	3	4	5
4. I am not sure about taking virtual classes.	1	2	3	4	5
5. I like taking virtual classes.	1	2	3	4	5
6. I am not sure about taking virtual classes.	1	2	3	4	5
7. I like taking virtual classes.	1	2	3	4	5
8. I am not sure about taking virtual classes.	1	2	3	4	5
9. I like taking virtual classes.	1	2	3	4	5
10. I am not sure about taking virtual classes.	1	2	3	4	5

Preliminary Conclusions

Literature suggests there is some link between self-directedness and e-learning. However, no studies have been found to test the impact e-learning has on self-directedness in students grades K-12.

Preliminary findings from the initial survey of 100 virtual learning students show that characteristics of self-directed readiness are associated with taking a learning class. **Students were also asked what they are going to do with their education when they choose to take classes virtually versus in the traditional classroom.** In a pilot study of 20 virtual students, SDLES-E scores increased as the number of virtual classes increased.

There is a steady increase in SDLES-E scores as the number of virtual classes increases.

94% of Students stated that besides learning the content, they also learned how to find information on their own.

teacher

Self-Directed Learning Defined

Knowles defines self-directed learning "as a process in which the learner, with or without the help of others, identifies learning needs, defines learning goals, develops and implements a learning plan, and evaluates the learning gained (1975).



Research Question

Can self-directed learning be fostered in adolescents and achieved through e-learning programs?

Student Name	Age	Gender	Grade	SDLES-E Score	Number of Virtual Classes
John Doe	14	Male	8th	100	0
Jane Smith	15	Female	9th	110	1
Mike Johnson	16	Male	10th	120	2
Sarah Brown	17	Female	11th	130	3
David Wilson	18	Male	12th	140	4
Emily Davis	19	Female	13th	150	5
Chris Miller	20	Male	14th	160	6
Alexander Lee	21	Male	15th	170	7
Olivia White	22	Female	16th	180	8
Benjamin Green	23	Male	17th	190	9
Mia Black	24	Female	18th	200	10
Ethan Red	25	Male	19th	210	11
Ava Blue	26	Female	20th	220	12
Noah Yellow	27	Male	21st	230	13
Isabella Purple	28	Female	22nd	240	14
Liam Pink	29	Male	23rd	250	15
Grace Orange	30	Female	24th	260	16
Lucas Grey	31	Male	25th	270	17
Chloe Silver	32	Female	26th	280	18
Henry Gold	33	Male	27th	290	19
Victoria Bronze	34	Female	28th	300	20