Research on Adventist Education:
Curriculum, Teaching & Learning Studies

Elementary & Secondary Education (40)


The study explored the relationship of multiple intelligences to the academic achievement of grade six pupils in Northern Luzon Mission. The theory developed by Howard Gardner was the basis of the theoretical concept.

Data were obtained from 310 pupils who were enrolled for the SY 2001 – 02 in the 24 church schools operated and supervised under the Northern Luzon Mission. This comprised 61.5% of the total population of 504 pupils in 44 schools. Participants responded to the Multiple Intelligences Questionnaire (MIQ), a self-construct instrument, which was personally administered by the researcher. It contained 70 items with 10 questions each representing the seven intelligences namely: verbal-linguistic, logical-mathematical, bodily-kinesthetic, musical, visual-spatial, intrapersonal and interpersonal.

The statistical analyses of the study employed mean, frequency, percentage, multiple regression and chi-square. Major findings in the study led to the following conclusions: The most dominant intelligences of the grade six pupils were logical-mathematical, musical, bodily-kinesthetic, and intrapersonal. The academic achievement level was 84.09%, which is average in the grading standard of the Mission.

The study also found that logical-mathematical and intrapersonal intelligences were related to the academic achievement with a contribution of 9.25%. The other five intelligences, namely: verbal-linguistic, visual-spatial, musical, bodily-kinesthetic, and interpersonal did not have significant relationships to academic achievement.

Gender among the grade six pupils does not confine one to a certain specific intelligence. The study found that male and female participants in the study did not have significant correlations in their multiple intelligence.


Most students and teachers recognize the relationship between effort and grades earned. However, many students place too much emphasis on 'native ability' and don't put as much effort into their studies as others. This article includes results from a study which used the Diligence Inventory (DI) along with a standardized test such as the ACT to predict the student's GPA. If students can raise their DI score, their GPA will be raised as well. A copy of the DI is included in the article.

*Full text on CD:* jae199356013105.pdf

Bhola, M. O. (1981). *An assessment of curriculum needs for family life studies in Trinidad and Tobago* Andrews University, Berrien Springs, MI.

*Purpose of the Study:* This study is designed to assess the curriculum needs in Family-Life Studies for Seventh-day Adventist schools in Trinidad and Tobago where no adequate needs assessment has been undertaken.

*The Procedure:* The Family-Life Survey was hand delivered to each of the sixty-six possible respondents. The information for completing the survey was included with it. For each of the first six items, a single blank was to be filled in. For the next forty-one items two responses were requested for each. The topic-preference rating and the school-level preference were indicated on a 5-point Likert-type scale. The surveys were completed by college students, parents and teachers residing in Berrien Springs but who had lived in Trinidad and Tobago at sometime during the last fifteen years.

*Technique:* Fifty-two completed surveys were analyzed. The first three items describing the subjects were scored for raw totals, and the last three items for averages. The remainder of the data was analyzed by computer to examine the percentage responses for each item on each choice of preference and school-level selected. Items were arranged from highest to lowest percentage to determine the preference of choice.

*Findings:* The findings indicated that there was a positive need for the introduction of family-life education at each school level. It was observed that each subject area was to be introduced at the primary level and that matters pertaining to religious training should be emphasized throughout the school curriculum.

*More Information:* Full text not available online. Andrews University Library G.S. Th. B575

The purpose of this project is to offer a comparative insight into the different approaches to music-education within the primary curricula of two colleges. The first of these is the Diploma of Teaching (Primary) offered by Avondale College, Cooranbong N.S.W.- a private institution operated and owned by the Seventh Day Adventist Church (South Pacific Division) - as a College of Advanced Education. The second course is the Primary Diploma in Early Childhood offered by the Newcastle College of Advanced Education, Waratah, Newcastle N.S.W. Any special approach to music education within these courses is of concern. Also, the study shows how the objectives of the syllabus are perceived as being relevant by the students.

A number of different approaches to music-education are presented in an attempt to establish a standard by which to evaluate a worthwhile music-education course. This standard is basically the Kodaly method and its practical adaptations to the N.S.W. primary school environment as propounded by Ms D. Hoermann in "A Developmental Music Program (Kodaly-based)".

The research findings indicate certain directions in primary music education that are congruent with the established standard. The survey also revealed interesting student perceptions of the music courses being studied.

*More Information:* Copy available from Avondale College Library [780.711944 B63]

Bottroff, S. M. (1993). *The impact of group versus individualized classroom activities on the levels of achievement of students in a tenth-grade religion course.* La Sierra University.

The purpose of this study was to determine the effect of various classroom activities on achievement. Learning styles, self-esteem, and gender were considered as covariates. Unique to this study is the comparison of achievement of students involved primarily in individualized activities with achievement of other students involved primarily in group activities.

The population for this study consisted of the 531 students of Loma Linda Academy, California, during the first semester of the 1992-93 school year. The students comprise a highly diversified cultural mix of races, aged 13-18, and are drawn from lower to upper-middle social classes. The sample of students used in this study was the 142 students who registered for the required tenth-grade class in History of Religion III. At the beginning of this study, data on self-esteem were collected using the Coopersmith Self-Esteem Inventory (1990), data on learning style preferences were collected using
the Dunn/Dunn/Price Learning Style Inventory (1990), and data on subject knowledge were collected using a teacher-prepared pre/posttest instrument. At the end of this study, data on subject knowledge were collected using the identical teacher-prepared pre/posttest instrument.

Conclusions included: (1) Individualized activities were most effective for producing the highest mean and highest percentage of growth between pre- and post-test scores. (2) Group activities were least effective by generating the smallest amount of growth between pre-and posttest scores. (3) Individualized and group activities combined resulted in the least amount of achievement of all three methods. (4) Definite gender differences existed as related to academic achievement. (5) A correlation existed between levels of achievement and student preferences to learning styles.

Recommendations for secondary teachers: (1) Develop individualized activities as a potential means of increasing student achievement. (2) Determine student's preferred learning styles and consider them when planning classroom activities.

Further research is needed to: (1) Determine gender differences in adaptability/flexibility in relation to varying academic methodologies. (2) Confirm/discover teaching methods that incorporate motivational rewards/punishments as related to classroom disciplinary procedures on the secondary level. (3) Determine the relationship of socio-economic levels and achievement. (4) Consider student intelligence levels and/or grade percent averages as covariates regarding achievement.

More Information: Full text not available online


Are secondary teachers aware of Adventist curriculum resources? Which ones do they actually use to integrate faith in their classes, and how effective do they perceive these to be? One of the survey's findings suggest that greater support for Adventist elementary and secondary education may be the best marketing strategy for Adventist colleges and universities. Recommendations include promoting partnerships across levels, linking preparation in teaching from a biblical worldview to certification/credentialing, implementing training of trainers for faith integration globally, effectively using technology to disseminate available resources, and building peer-mentoring networks to support teachers in intentionally integrating faith in learning.

Full text on CD: jae200770011608.pdf

A 2005 survey of 837 Seventh-day Adventist high school or secondary teachers in 12 world divisions researched the following questions:

1. How do Adventist secondary teachers perceive the philosophy of integrating faith in learning? How, if at all, are they practicing this Adventist worldview?
2. To what extent are secondary teachers aware of available Adventist curriculum resources?
3. Which of these faith-integrating resources, if any, do secondary teachers actually use?
4. What kinds of resources, ideas and support are considered useful in integrating faith and learning in the classroom? How effective are resources actually used perceived to be?
5. What factors negatively impact teaching from an Adventist worldview?
6. How can the needed resources best be delivered to Adventist secondary schools?
7. How have resource awareness, usage and needs changed since the first global survey of high school teachers in 1997?

*Full text on CD: GlobalSecondaryTeacherResearchReport07.pdf*


One of the most common questions mathematics teachers hear from their students is a question of content value: "When am I ever going to use this?" This research paper looks at the question of content value for students enrolled in an elementary methods course designed to help them develop their abilities to teach mathematics. At the end of each term, the professor asked students to identify the ten most important things they learned during the class. These qualitative data were collected across 7 years. Initially, each section of the course was analyzed as a single case. Researchers then looked at data across cases to identify common learnings. The areas identified as important by students were compared to the instructor's syllabi to determine how they aligned with learnings identified by the professor as important. Finally, the student-identified learnings were compared with those listed in national standards produced by the Association for Childhood Education International. Results of this study document the
alignment (or lack thereof) between student, professor, and expert (standards) perspectives on the curriculum for preparation to teach elementary mathematics. Additionally, the paper documents how the data helped inform course revisions while the research was ongoing.

Full text on CD: burtonmathmethods.pdf


This study investigated student perceptions of 7th and 8th grade Adventist science education programs and their relationship to achievement in science as defined by performance on the Iowa Test of Basic Skills. Findings revealed that students held generally poor perceptions of science education. Hierarchical regression analysis revealed 8 significant predictors of science achievement for multigrade and 2-grade classrooms and 5 significant predictors for single-grade classrooms. The 5 predictors shared across all classroom types included "complete assignments," "environment conducive to study at home," "read textbook ahead," "teacher grades fairly," and "subject made interesting."


This investigation focused on instructional practices within 5th through 8th grade science classes of selected Seventh-day Adventist schools. Teachers reported regular use of discussion, student projects, and tests or quizzes. Most respondents said they did not feel prepared or had "never heard of" inquiry, the learning cycle, or constructivism. Over half the respondents felt discussion, student-projects, and hands-on laboratory work were effective instructional practices in science classrooms. Learning cycle and constructivism were described by most respondents as "not at all" effective; many respondents have "never heard of" these same two instructional approaches.

**Purpose of the Study:** The purpose of this study was to (1) compare home economics curricula for state secondary schools in Australia and Seventh-day Adventist secondary schools in North America, and (2) adapt Australian state curriculum guides to meet the Seventh-day Adventist philosophy and goals for home economics education in Australian Seventh-day Adventist schools.

**Method:** Examination of curriculum guides for five Australian states and North American Seventh-day Adventist applied arts curriculum framework was made to determine the philosophy, goals, content areas, requirements, and concepts for secondary school home economics. An assessment of home economics curriculum guides from Australian state secondary schools and North American Seventh-day Adventist secondary schools was made and concepts relevant to home economics in Seventh-day Adventist secondary schools in Australia were listed.

**Findings:** It was found that home economics in Seventh-day Adventist secondary schools in North America include many of the same concepts found in home economics in Australian state secondary schools. The major differences are that the Seventh-day Adventist curriculum includes the principles of healthful living, simplicity, economy, moralistic influences, temperance, and modesty whereas the Australian home economics curriculum teaches an overall way of living rather than a specific type of lifestyle.

**Conclusion:** The Australian concepts for state secondary schools could be adapted to incorporate the Seventh-day Adventist philosophy and goals for home economics in a Seventh-day Adventist school system.

**More Information:** Full text not available online. Andrews University Library G.S. Th. C321


**Purpose.** The intent of the study was to determine the extent to which educational ideology influences curriculum use with Seventh-day Adventist secondary teachers in North America. The research endeavored to determine the teachers' ideological approach to education, the correlation of this preference with the teachers' acceptance and usage of prescribed curriculum materials, the extent to which teachers have
concerns in each of the five cyclical tasks of curriculum development and the relationship of the problem areas to ideological preference.

Findings. Responses to the questionnaire, including the O'Neill Educational Ideology Inventory, were received from 148 randomly selected teachers in the disciplines of English, Math/Computing, Religion, Science and Social Studies. Analyses indicate that there are significant ideological preferences among teachers with "Liberalism" the most favored choice; that teacher usage of prescribed materials is not significantly greater than 50 percent; that teachers perceive a problem with the orientation and evaluation tasks in the current system of curriculum development; and that Math/computing teachers are in general more conservative and more satisfied with the curriculum development process than other teachers.

Recommendations. Recommendations for programmatic considerations are that curricularists be made aware that the majority of teachers are liberal in their educational outlook and that new materials with this approach will be more readily accepted; evaluation of materials is perceived as inadequate by a majority of teachers; that new material orientation is an area of dissatisfaction in the current system; and that teachers in different disciplines do have different responses to curriculum development problems. Further research should attempt to determine why the majority of SDA secondary teachers are not using the prescribed curriculum materials on a regular basis; why teachers are not satisfied with the orientation to new materials; and to explore more thoroughly the philosophical bases of SDA education and the full meaning of the liberal trend in teachers.

More Information: Full text not available online


Purpose. The purpose of this study was to investigate the effects of the Audio Visual Tactile (AVT) treatment in third- and fourth-grade disabled readers in three areas of reading: word-recognition skills, silent-reading comprehension skills, and attitude towards reading.

Procedures. A Quasi-Experimental Pretest-Posttest Nonequivalent Group Design was used. The subjects were 87 students in grades 3 and 4 with at least low-average intelligence (I. Q. scores of 80 and above), receiving Title I reading-support services during the 1979-80 school year. The students were from the Central, North side, and Oak Manor elementary schools in the Uiles COIT11unity School District, Niles, Michigan.
Two experimental conditions were employed for the study. (1) AVT treatment, and (2) Attention-Control treatment. The district reading specialist assigned students at Central elementary school to the AVT treatment group (N=46), and students at North side and Oak Manor to the Attention-Control group (N=41). Both experimental conditions received comparable instruction in reading during regularly scheduled reading class periods and during Title I laboratory periods, where individual attention to reading problems was given. The only apparent reading curriculum difference was the introduction of the AVT method of reading into the AVT treatment group. Both groups spent equal time for reading instruction. The AVT treatment was administered in 9 groups (4-6 students in each group) by 3 instructors assisted by 3 aides trained in the AVT method. Students were randomly assigned to each of the 9 AVT treatment groups. The experimental period lasted for 9 weeks, with the AVT treatment groups receiving 16 to 18 hours of AVT instruction. Pretesting was conducted the week before and post testing the week after the treatment period. Three instruments were used to collect data: (1) the Woodcock Word Identification subtest Form A for pretest, and Form B for posttest to determine word-recognition skills; (2) the Nelson Silent Reading Comprehension subtest Form A for pretest and Form B for posttest to assess silent-reading comprehension skills; and (3) the Heathington Intermediate Scale for pre and post testing to determine attitude towards reading.

Of the 87 students who participated in this experiment, 4 students did not meet the attendance criteria set by the researcher, thus data from 83 students were included for analysis (AttentionControl group=40 students, AVT treatment group=43 students.) To analyze the data collected, three statistical methods were used: (1) one-way univariate analysis of covariance, (2) multivariate analysis of covariance, and (3) discriminant analysis. I. Q. scores and pretest scores served as the covariates.

Results. The analyses revealed the following results at the .05 level of significance:

1. AVT treatment significantly increased word-recognition scores for grades 3 and 4 combined, for grade 3, grade 4, and for average I. Q. students. There was no significant difference in word recognition test means for the high-average or the low-average I. Q. students, although in both cases the non-significant difference was in the direction of the AVT treatment group.

2. AVT treatment significantly increased silent-reading comprehension scores for grades 3 and 4 combined, and for grade 3. No significant difference in test means was found for grade 4, high average, average, and low-average I. Q. students, although the non significant difference favored the AVT treatment group.

3. No significant differences in reading attitudes was shown between mean posttest scores of the AVT treatment and the Attention control groups.

4. There was a significant difference between the centroids of the two treatment groups with respect to posttest scores on word recognition, silent-reading comprehension, and attitude towards reading.

5. The AVT treatment group was significantly distinct from the Attention-Control group in that the former had significantly higher mean scores for word-recognition and Silent-
reading comprehension in that order of importance.

More information: Full text available online

Hale, C. L. (2009). *The inclusion of students with actual or perceived learning disabilities in the Seventh-day Adventist elementary classroom.* Dissertation, La Sierra University.

This qualitative study investigated the effect of full inclusion of learning disabled students in Seventh-day Adventist (SDA) classrooms. Information on the dynamics of full inclusion was gathered through interviews with 15 elementary teachers in a Western Conference of SDA. Literature on inclusion in public and private educational systems was reviewed. Additional information was gathered from SDA educational policies and procedures in relation to inclusive practices. Findings revealed that while SDA educational policy does not recommend acceptance of learning disabled students into general education classrooms, these students are attending. Qualitative analysis of the data identified: (a) types of learning disabilities seen in SDA classrooms; (b) the effect of inclusion on teachers, students, and the learning environment; (c) strategies used by teachers to accommodate learning disabled students; and (d) recommendations by teachers for the improvement of inclusive practices in SDA classrooms. A review of the REACH Resource Manual is included.

More Information: Full text available online


This study investigated the provisions made for gifted students in Seventh-day Adventist Primary Schools in Australia, with particular reference to six aspects of gifted education, namely: (1) identification, (2) gender equality, (3) priority, (4) the extent of provision, (5) forms of gifted education, and (6) the qualifications and professional development of teachers in the Seventh-day Adventist Education System.

Data were collected from 27 principals of Seventh-day Adventist Primary Schools in Australia using a survey instrument specifically designed for this study. Qualitative and quantitative analyses were used to analyse the data derived from the survey instrument.

The findings of this study have shown that in the majority of cases, Seventh-day Adventist Primary Schools may not be adequately providing for the needs of gifted children in their care. Although some schools were found to provide better provisions for gifted students than others, many schools failed to even identify minimum expected
proportions of gifted students. It was found that an equal overall proportion of males-females were involved in a gifted education program, but that the extent of provision for gifted students was generally quite limited. The various schools identified an awareness of a variety of programming strategies, although these strategies were not always implemented. It was also found that a lack of teacher qualifications and professional development in relation to gifted education was present in many schools.

Recommendations and suggestions for further research are included in the study.

More Information: Copy available from SPD Education Office


Problem: Is it not known to what extent home economics performance objectives (daily living skills) are being taught in the Kentucky-Tennessee Conference of Seventh-day Adventist.

Method: Teaching practices in seventh through ninth grades were compared with home economics performance objectives as outlined in the North American Division Basic Curriculum Frameworks, K-12. Twenty-one teachers participated. Differences were tested by ANOVA.

Results: Teaching practices of the respondents were significantly different from performance objectives. Differences were reported in teaching performance objectives when home economics was taught in the context of other subjects instead of as a separate subject. Educational training of elementary teachers in the area of home economics was different than hypothesized.

Conclusions: Teachers of grades 7 through 9 need to be better prepared for instruction of home economics performance objectives. Further studies would be helpful to determine the importance of home economics curricula for grades 7 through 9.

More Information: Full text not available online. Andrews University Library G.S. Th. I641

The purpose of this study was to qualitatively determine the related factors that contribute to the existence of underachievement. The participants were 3 subjects (underachieving students) and 14 informants (5 teachers, 6 peers, and 3 parents) from a selected junior academy in the Philippines. Classroom observations, interviews, and school records were used to collect data. This study used multiple triangulations (data, methodological, and thematic) to describe themes related to underachievement.

First of all, the study identified typical characteristics of the 3 underachievers from 3 groups of informants: teachers, parents, and peers from the same school context. Second, the perspectives of underachievers about school helped link reasons for their underachievement. Finally, the reasons for underachievement were probed in 4 areas: school, home, peers, and personal. School factors included no interest in school, being teased and bullied, and disliking class activities. Factors related to home were lack of motivation, being away from parents, health problems, unrealistic expectations of parents and guardians, and parents/guardian’s negative reactions. The single, yet important peer factor was the negative impact of their relationship with their peers. Personal factors identified were difficulty to focus or concentrate, laziness, unresponsiveness to teachers’ support, being under-aged in the grade, and the negative inner-self/attitude.

Recommendations for principals/school administrators, teachers, and parents include the following: teachers be given opportunities for professional development, teachers implement differentiated lesson activities, and parents be supportive of children’s education.


This study was designed to investigate through hermeneutic phenomenology the relationship that Seventh-day Adventist students reveal in their dialogue journal writing between the novels and drama they study in class and their own values and religious beliefs. Its further purpose was to present an interpretation of the teacher/researcher’s use of these journals in directing the students’ understanding of fiction.

Nineteen 12th-grade students enrolled in an Advanced Placement English class
participated weekly with their teacher in writing in their journals their thoughts and / or questions concerning the fiction assigned, studied, and discussed in class. The text of each of the dialogue journals was analyzed for explicit and implicit references to ethical and religious concerns; the interpretation theory of Ricoeur was used as a basis for the investigation.

The findings reveal no evidence that SDA students studying fiction found anything in their experience with fiction to cause them to question their beliefs or values. There is evidence, however, that SDA students tend to examine and interpret their experience with literature using their own belief and value system. The findings also reveal dialogue journal can be used as a means for individualizing instruction to meet specific needs of students or for directing them toward paths more productive to learning or to reflection. The findings also reveal that dialogue journals can be used as a means for generating genuine dialogue with the students.

More Information: Copy available from Avondale College [Main- 809.0013 L23]


Liske presents the results of a study designed to discover the feelings and perceptions of school administrators and teachers regarding the status of geography education in Adventist schools in North America.

Full text on CD: jae199052030704.pdf


At the time that Seventh-day Adventists opened their first school at St. Kilda Road, Melbourne, in 1892, to train ministers, they had no plans for the school system which emerged. However, as quickly as plans were formulated, other forces and influences came into play, shaping and moulding the curriculum. Sometimes the results were in harmony with the church philosophy, at other times the influencing factors opposed the church’s educational philosophy. The first curriculum placed strong emphasis on Bible study and the 3Rs. This was expanded in line with a developing work/study ethic in the second school at Avondale in New South Wales, to include a strong industrial and manual training department. Subjects and methods were in harmony with the philosophical ideas of Ellen White, one of the founders of the school.
As parent pressure in the various churches demanded primary education for their children, Avondale was forced to introduce a teacher training programme to supply church school teachers. By 1910, the scope of the total curriculum had broadened to include a chain of primary schools and two junior boarding schools patterned on Avondale. The rapidly expanding system required supervision. This was provided by the Educational Secretary, L.A. Hoopes, who developed a church oriented curriculum for all schools from Western Australia to New Zealand.

By 1910, developments in state education departments began to exert pressures on Seventh-day Adventist schools. The primary schools in 1914 accepted the state courses but, following a leadership crisis in 1918, the training college at Avondale deflected the development of its curriculum from the state secondary courses and public examinations, to its own narrow interests. American leaders in the 1920s, endeavouring to return the college to what they believed Ellen White had proposed at its founding, further isolated the school from Australian conditions. Teachers at the intermediate schools at Carmel, Western Australia and Longburn, New Zealand, tended to follow the Avondale courses.

In the 1930s W.J. Gilson, an Australian, became the leading educational administrator. He introduced a unified curriculum in the primary schools and brought the Avondale curriculum into closer harmony with Australian conditions by relating course requirements to the Leaving Certificate standard. His greatest contribution, however, was to encourage the development of day high schools in most major centres. By 1940 this had created a major shift in the thinking of teachers, administrators and parents. Previously, because of the attitude of leaders to higher education, tertiary training was avoided and even frowned upon. However, as teachers needed university degrees to satisfy secondary registration requirements in some states, church leaders made plans to upgrade the Avondale curriculum.

During the 1950s and 1960s Adventist primary and secondary schools faced similar, problems to those found in state and catholic schools, but they did not join the radical moves to change curricula which developed in many states from 1967 onwards. Two of the junior boarding schools offered secondary courses. Longburn, in addition, was able to develop a primary teachers' course, that was recognised by the New Zealand Government. From the early 1950s Avondale offered an Arts degree course affiliated with an American college and a Science degree programme through the University of London with the emergence of Colleges of Advanced Education in Australia in the 1970s, Avondale was able finally to offer an Australian registered degree course.

The story of curriculum growth in Seventh-day Adventist schools as a whole reveals six important influences shaping curriculum change and development. These have been the church’s philosophy, the effects of leadership, government requirements, social
pressures, teachers - their methods and personal character qualities; and financial limitations. Over the eighty-five years surveyed in this thesis, the developing curriculum was subject to tension between state requirements and church objectives; between academic and practical strands; between American and Australian influences; between clerical administrators and educational practitioners; and between religious and vocational aims. The effect of each as it impinged on the development of the curriculum is examined.

More Information: Copy available from Avondale College-Main [371.0716794 L71-1]

Moore, D. N. (1959). A supervisory and remedial reading program in a Seventh-day Adventist elementary school. Andrews University, Berrien Springs, MI.

Statement of the problem. It was the purpose of this study (1) to examine the objectives of the reading program in the Seventh-day Adventist elementary school in terms of its philosophy of education, (2) to determine the best methods of meeting these objectives through supervision and remedial instruction, and (3) to study the effect of such a supervisory and remedial program on the reading accomplishments of the first six grades in the John Nevins Andrews school.

Importance of the study. It is well understood by teachers at almost every level that basic reading ability is essential to all other learning, and that much of the current educational dilemma stems from the fact that many students do not learn to read efficiently in the elementary school. Also because of the religious emphasis in the Seventh-day Adventist schools, it is necessary that the students achieve facility in the reading of the Bible and the books of the church. Any device, therefore, which can increase the quality of the over-all reading program is worthy of thoughtful consideration and investigation so that the most efficient means may be employed in other denominational schools.

Methods used. Study was given to the basic philosophy of Christian education of the Seventh-day Adventist school system as set forth in the writings of Ellen White, particularly as they apply to reading. Study was also given to general methods of supervision as well as reading supervision as set forth by experts in the field of reading. Intensive participation and observation in the regular classrooms of the John Nevins Andrews school, including actual part-time teaching in most of the classrooms, gave opportunity to evaluate classroom procedures and to compare them with the best of current practice as found in educational literature. As nearly as possible, the best methods of supervision and remedial instruction, individual and group, were put into practice in the John Nevins Andrews school, and both objective and subjective results were obtained. This included an all-school testing program as well as frequent testing of remedial reading students.
Scope of the problem. Study was limited to the supervision of reading and remedial instruction in the first six grades of JNA and the results obtained in the school year 1958-59.

More Information: Full text not available online. Andrews University Library G.S. Th. M821


Problem. In America today, there is a current emphasis on brain research and implications for school improvement and reform in education. Specific curriculum models that address brain research results need to be studied to provide evidence of their effectiveness. Integrated Thematic Instruction is one curriculum design that does address this need. Is this curriculum a viable answer to school improvement and reform? Does Integrated Thematic Instruction have an impact on students' attitude toward school and learning?

Purpose. The purpose of this study was: (1) to describe what was taking place instructionally in classrooms where Integrated Thematic Instruction was being implemented; and (2) to determine the attitudes and emotions students have toward school and learning when Integrated Thematic instruction was being used.

Methodology. This qualitative case study was completed using ethnographic tools for data collection including student interviews, direct observation, surveys, and checklists. A domain analysis was used to organize and analyze the data. A cross-case analysis was used to search for themes. The findings were presented using educational criticism as an organizational structure.

Three teachers in a private Christian system of education were chosen based upon their high level of implementation of Integrated Thematic Instruction. A total of 66 students in three classes at different grade levels were interviewed to determine what attitudes were present toward school and learning. Parents of these students filled out surveys. Direct observation of each classroom was completed for a total of 60 hours at each location.

Finding and conclusions. One hundred percent of the students in this study were found to have positive attitudes toward school and learning. Each of the students showed an awareness of the theme or topic being covered. It was determined that thematic instruction was an important factor in the development of positive attitudes. The data were analyzed further to determine what specific qualifies of Integrated Thematic Instruction created these positive attitudes. Three themes emerged in the development of positive attitudes: (1) students felt accepted, (2) students were engaged in active learning, and (3) students felt competent in a specific subject area.
While integrated Thematic Instruction shows promise as an effective model for school improvement, the implications of this study go beyond the value of one curriculum model. The following conclusion can be drawn from this study: Elementary educators and administrators will find that positive attitudes will emerge when acceptance, engagement, and competency are prevalent in their programs.

More information: Full text available online


Purpose. The purpose of this study was to compare the academic achievement, as measured by the Standardized Achievement Test, of Seventh-day, Protestant, Roman Catholic, and Public school sixth-graders in Curacao, Netherlands Antilles. This study also sought to determine if a significant relationship existed between academic achievement and school system, geographical district, school location, social class, primary language, gender, mental ability, age, and class size.

Procedures. Data used in this study were obtained from the records of 584 SDA, Protestant, Roman Catholic, and Public schools' sixth-graders for the school years 1981 through 1985. Data were treated with ANOVA's, chi-squares, correlations, t-tests, and stepwise multiple regressions at the .05 level of significance.

Findings. (1) Students attending the Protestant school system achieved the highest on non-verbal and verbal mental ability and on Arithmetic and Dutch Language achievement. (2) Dutch-speaking students had higher mental ability and achievement scores than other students. (3) While the most important predictor of achievement was Verbal Mental Ability, Dutch Language scores was the most important predictor of Verbal Mental Ability.

Conclusions. (1) The Netherlands Antilles educational system is primarily geared toward serving the needs of the minority Dutch-speaking population that attend the Protestant school system and serves very poorly the needs of the majority Papiamentu-speaking population. (2) Proficiency in speaking Dutch is foundational to overall academic achievement in Curacao. (3) After completing elementary school, students from the Protestant school system receive university preparation, while students from the other school systems receive vocational education. (4) The difference in mental ability and academic achievement between the Protestant school system and the other school systems is not necessarily due to the quality of education received in any of these school systems but rather to the characteristics of the student population that attend these schools.
Recommendations. Based on the findings and conclusions it was recommended: (1) That lower elementary grade students whose primary language is Papiamentu, be taught "essential" subjects in Papiamentu, and that Dutch be gradually introduced as the medium of instruction for "non-essential" subjects. (2) That the elementary schools institute an intensive Dutch Language education program for the majority non-Dutch speaking population.

More Information: Full text not available online


A quasi-experimental design was used to statistically compare academic achievement among 277 students in single-grade and multigrade classrooms in the Pacific Northwest. Adjustments were made using analysis of covariance to help insure comparable group means. Results indicate that academic achievement with a single exception is not related to enrollment in single grade or multigrade classrooms even after the effects of gender and length of years in classroom were held constant. Less direct instruction and more process time was observed in multigrade rooms.


Layers of Significance Theory (LST) suggests that the basic motivation for people is the need to be of significance. The theory identifies nine layers of significance. These are not stages through which one passes, but cumulative layers giving individuals increasingly greater number and variety of motivations to make prosocial and positive moral choices. LST also proposed that many moral decisions are not made reflectively by students who carefully weigh the alternatives, that often they are made "on the spot" in a instinctive manner. Students who have more layers of significance are more likely to make positive choices. Students who have few appear to have little to lose by attempting to gain personal significance through antisocial actions. This theory encourages school administrators to plan their curricula in ways that maximize students' probability of developing their layers of significance and making positive choices.

Pawluk explains why students don't always make rational choices based on research done of a random sample of 146 students from both public and Adventist schools in the Walla Walla Valley in Washington State. This article outlines the process and findings and explains each of the Layers of (Personal) Significance that motivates students to make certain decisions.

*Full text on CD: jae199861012404.pdf*


The purpose was to identify teacher behaviors which promote student achievement in reading comprehension, as measured by comparing variables on the Reading Comprehension Observation Instrument (RCOI) and the Reading Comprehension test of the Iowa Tests of Basic Skills (ITBS). Variables were time before, time during, time after, large group, motivation, purpose-setting, literal and higher level questions, location and prediction of answers, wait time, teachers’ acceptance of answers, and discussion.

*Methods:* Data were collected from 24 fourth grade teachers in southern California Seventh-day Adventist schools, and consisted of the results of the Fall, 1986, and Spring, 1987, ITBS administrations and three consecutive day observations of each teacher. Multiple correlation analyses showed the relationships among the variables and achievement. Hypotheses were tested using frequency, correlations, one- and two-way ANOVAS, and discriminant analysis. Students were divided by initial standing (above or below the median GE 41) and progress (losers made zero or fewer months of gain; holders made one to 12 months; gainers made 13 or more months).

*Findings:* (1) Teacher behaviors were significantly different when comparing losers, holders, and gainers: (a) holders had more time during, purpose, higher level questions, wait time; (b) losers had more time after, motivation, location and prediction, discussion; (c) gainers had more large group. (2) A cluster of variables significantly separated the losers, holders, and gainers: (a) the three groups by acceptance, time during; (b) losers and gainers by discussion, time before, purpose, literal recall; (c) holders and gainers by acceptance, motivation, time during; (d) ends and holders by time during, higher level questions, purpose. (3) Little comprehension instruction observed, contradicting teachers’ priority belief in its importance as a goal. (4) Three most significant variables related to student achievement were time during, literal recall, and higher level questions.
Recommendations: (1) Use of ROCI in various populations and grade levels to determine changes in variable frequency and significance. (2) Further statistical analysis to determine the source of loser and gainer similarities. (3) Teachers to provide more independent reading time for all students. (4) Teachers to use more comprehension-fostering behaviors.

More Information: Full text not available online


Problem. One of the founders of Seventh-day Adventist education, Ellen G. White, advocated learning through practical experiences and critical thinking. In 1997, the Seventh-day Adventist Church recommended problem-based learning (PBL) as a preferred teaching practice for its North American K-12 schools. However, Brantley and Ruiz observed that many Seventh-day Adventist educators feel inadequate to use this method of instruction. Little information exists anywhere concerning teachers' awareness and perceptions of problem-based learning (PBL) or factors related to its use. This study examined the relationship between PBL, philosophy of teaching, preferences for PBL teaching components, and perceived barriers to PBL adoption and use.

Method. An ex post facto survey was conducted among a convenience sample of 315 K-12 teachers in 50 schools in Florida. Four instruments were used to gather data to answer four research questions. The same instruments were administered to a group of experienced PBL teachers and results were compared to the Adventist group.

Results. The majority of Seventh-day Adventist K-12 teachers in Florida are unaware of problem-based learning (PBL). Teachers who embrace a student-centered teaching preference are more likely to be aware of PBL. Little more than half the teachers have a student-centered teaching philosophy, and less than half appreciate the student-centered teaching components of PBL. Teaching philosophy is related to the teachers' age and preference for PBL teaching components. More female than male teachers embrace the student-centered components of PBL. The greatest perceived barriers to teacher implementation of PBL included (1) assessing and reporting student learning, (2) allowing students' needs and interests to determine pace and content of curriculum coverage, (3) a loosely structured, sometimes noisy learning environment, and (4) system unwillingness to provide PBL support sources. The majority of the teachers did not identify factors that would deter them from implementing problem-based learning.

Conclusions. Although most Seventh-day Adventist teachers are unaware of PBL and
Annotated Bibliography: Curriculum, Teaching and Learning Studies

seem to embrace a teacher-centered teaching philosophy, they appear willing to learn about the method and to implement it in their classrooms. However, they do not expect support from their school systems, parents, and colleagues, as preconditions to successful adoption. It should be noted that the major barriers to PBL adoption appear to be reflective of the teaching philosophy of the school systems, parents, and teachers. Addressing these barriers is likely to increase the possibility that successful adoption will take place.

More information: Full text available online


This study sought to address perceived student study skills needs, as part of a secondary school’s pastoral care program. Utilising a teacher action research approach, the inquiry focused on three main areas: investigating students’ prior study habits; the nature of existing, ineffective study habits that impaired performance; and ascertaining the impact of a study skills intervention program. Findings indicated that many students either were unaware of, or not employing, study skills. Ineffective time and self management impaired students’ study performance, possibly linked to a ‘cultural trace’. Perceived improvements in students’ study habits were reported, both by students and teachers. Three likely reasons were identified: The imminence of exams acting as a catalyst, the newly learned study skills, and encouragement by the teacher.

Full text on CD: potter_27-32.pdf


Education is strongly linked to economic development, prosperity and social progress, yet recently, the Solomon Islands has experienced economic and social problems. This research used a questionnaire and interviews to gather perceptions from curriculum stakeholders (government and private sector education administrators, teachers, parents, students and business people) regarding the construction, content appropriateness and accessibility of the Solomon Islands' national secondary curriculum. The data gathered is intended to provide constructive input into future curriculum development.

Data supported the retention of one national secondary curriculum, but highlighted the need for one that is flexible and that takes into account the opinions of all stakeholder
groups. Secondly, the content of the secondary curriculum provides much useful knowledge, but some gaps need to be filled, particularly in the area of the cultural, historical, geographical and global contexts of the Solomon Islands. Thirdly, the heavy emphasis on knowledge largely disregards students' moral, spiritual, physical, aesthetic and affective faculties. It has also resulted in the curriculum being implemented in a way that largely prevents students from learning many academic, practical and competency skills. This unbalanced approach to secondary education overlooks a need for values education and has produced a workforce with few skills and little ability to apply knowledge. Fourthly, while access to secondary education is being increased, data identified other accessibility issues that need attention. These include a lingering gender imbalance, poverty, and a lack of attention to the needs of slow learners. Additionally, a serious imbalance in the rural-urban distribution of resources and of well-qualified teachers has helped create an educated urban elite in a previously egalitarian society.

Recommendations and suggestions for further research are made which, if acted upon, could result in the Solomon Islands' secondary curriculum attending to societal needs and supporting economic and social progress much more effectively.

More Information: Copy available from Avondale College Library


El propósito del presente trabajo de investigación, fue aplicar un diseño experimental con el objeto de comparar el efecto en el rendimiento académico del nuevo tratamiento de solución de problemas de química a través de estrategias por descubrimiento con el tratamiento tradicional de memorización y mecanización, ambos ensayados en los alumnos del tercer grado de secundaria del Colegio Unión de Naña - Año académico 2006.

Se inició tomando una prueba diagnóstico que incluyó 20 preguntas que evaluaron la aplicación de las diferentes estrategias de solución por descubrimiento: Estrategias de comprensión y formas de representación, estrategias heurísticas de investigación y estrategias algorítmicas.

Dedicamos el primer capítulo de este trabajo al planteamiento del problema de investigación, los objetivos, la justificación, las limitaciones y los estudios antecedentes, entre otros aspectos.
En el segundo capítulo nos ocupamos de los fundamentos teóricos involucrados en la investigación tales como la enseñanza por descubrimiento, técnicas didácticas por descubrimiento, la medición del rendimiento académico y la guía de solución de problemas de química utilizando las estrategias por descubrimiento. Para los procesos algorítmicos se acompañan los respectivos diagramas de flujo.

Finalmente, en los capítulos tercero y cuarto, respectivamente, se exponen claramente los aspectos metodológicos de la investigación, la planeación y validación de los instrumentos utilizados, y el análisis de los resultados obtenidos. Se presenta paso a paso los cálculos matemáticos en la aplicación del estadístico t de student para la prueba relativa a la diferencia de dos medias, que de hecho, servirá como guía en el análisis cuantitativo de la apreciación del rendimiento académico de los estudiantes. Pretendemos con todo ello contribuir al mejoramiento de las operaciones cognitivas que realizan los alumnos al resolver problemas de química a través de este nuevo tratamiento, para que, tomando como punto de referencia algunos de estos resultados, encuentren los docentes de química cauces que les permita mejorar la tarea docente.

More Information: Dirección General de Investigación de la Universidad Peruana Unión (UPeU), http://investigacion.upeu.edu.pe


Problem . Science education has long been a great concern in the United States, where less than one-third of the students perform at or above the proficient level. The purpose of this study was to investigate the status of the science program in a selected Union Conference of the Seventh-day Adventist school system. Specifically, this study investigated the perceptions of teachers and students regarding the extent to which the science program meets the criteria of the National Commission on Mathematics and Science Teaching for the 21st century and to what extent these criteria are related to academic performance as indicated by Iowa Test of Basic Skills (ITBS) science scores.

Method . Two questionnaires designed by the researcher were used to get responses from 424 students in seventh and eighth grades and 68 teachers to see how this school system compares to the criteria of National Commission on Mathematics and Science Teaching for the 21st century. Three classroom configurations were investigated in this study, namely: (a) multigrade, (b) two-grade, and (c) single-grade. Crosstabulation, one-way analysis of variance, Kruskal-Wallis test, and linear regression were used to analyze the four research questions of this study.

Results . The single-grade classroom configuration received a better rating for the science criteria (p < 0.01), and students from single-grade performed significantly better
than two-grade/multigrade (\( p < 0.01 \)) classroom configurations on their science achievement (ITBS). There were significant relationships among science achievement and the factors that measured the criteria of the National Commission for Mathematics and Science Teaching for the 21\textsuperscript{st} century.

**Conclusions.** The differences in teaching practices explained the discrepancies in the three classroom configurations. Schools can therefore develop policies and strategies to improve the practices in the teaching and learning process in science education that were identified as being deficient by the criteria of National Commission on Mathematics and Science Teaching for the 21\textsuperscript{st} century.


This study provided teachers and administrators of Adventist upper secondary schools in East Malaysia with empirical data on classroom learning conditions and the teaching of thinking skills. This cross-sectional survey of 25 teacher responses and 588 student responses from three schools, included the Form IV-VI subject areas of Malay, English, and history.

The instrument used was the Class Activities Questionnaire (CAQ) (Steele, 1982) to assess cognitive emphasis and classroom learning conditions. Demographic item and three open-ended comment areas regarding class strengths and weaknesses were included. Data analysis employed descriptive and comparative methods.

**Major findings** were as follows:
1. The typical upper-secondary teacher in Adventist schools in East Malaysia was between 20 and 40 years old, female, married, with 5 years or less of teaching experience, teaching fewer than four subjects, and holding a two-year college diploma or less. The typical upper-secondary student was between 15 and 18 years of age, female, and had attended Adventist schools for 2 years or less.
2. Respondents agreed that both lower and higher thought processes received moderate emphasis.
3. Both teachers and students saw lecture as the least used teaching approach. To students, examination-oriented instruction received the most emphasis. Teachers believed discussion to be predominant.
4. Teachers and students concurred that of the six classroom climate factors, humor received the least emphasis. Teachers perceived that feeling valued was receiving the greatest emphasis, whereas students perceived enthusiasm as most emphasized.
5. Teachers maintained that history courses had the most positive and English classes the least positive climate. Students viewed English with the most and Malay classes
with the least positive climate.

6. To the open-ended comment areas, students stated their liking for their teachers’ teaching approaches and warm relationships. However, they wanted to be physically and mentally active in classes and have better understanding with teachers who were teaching examination-oriented subjects. Teachers liked the students’ enthusiasm and cooperation in class activities, and wished to help students learn and score well on national examinations.

**Recommendations** are that teachers should place priority in teaching thinking skills, prepare well-planned class activities, and foster better understanding with students in examination-oriented subjects. School administrators should find ways to improve teachers’ educational attainment through in-service training, seminars, fieldtrips, distance learning, or formal education.


The purpose was to determine (1) which learning style elements, as characteristic of High and of Low Achievers in Math and in Reading, effectively discriminate between these groups, and (2) which learning style elements may be predictors of achievement in Math and in Reading.

Data were collected from the elementary schools (grades 3-8) of the Southern California Conference of Seventh-day Adventists and consisted of the September 1985 ITBS scores which were used to divide the population into the High Math Group, the Low Math Group, the High Reading Group, and the Low Reading Group, as well as the May 1986 Learning Style Inventory results. Multivariate Analysis of Variance (MANOVA) was used to test for grade and sex differences. Hotellings T-tests were run for each grade to determine differences in the learning style preferences between the High and the Low Achievers in Math and in Reading. Stepwise multiple regressions were used to determine learning style elements that were predictive of achievement in Math and in Reading.

**Findings:** (1) There was a significant difference in learning style profile by grade, but a sex difference only in grade eight. (2) There was a significant difference in the learning style preferences of the High and the Low Achievers for both Math and Reading. (3) Motivation, Persistent, and Responsible were characteristic preferences of High Achievers in both Math and Reading. Preference for 14 learning style elements in Math, and 11 elements in Reading were found to be significant predictors of achievement.
Recommendations: (1) Teachers and administrators should ascertain their pupils' learning style preferences and plan the environment, the curriculum, and the teaching methodologies to be as congruent as possible with pupil need. (2) Pre-service and in-service instruction in assessing pupil learning style and in adapting the classroom environment and teaching strategies to meet these individual needs be made available to teachers. (3) Longitudinal study be made to determine if learning style preferences remain stable over time and thus characteristic of the pupils, or if they change over time indicating that they may be characteristic of grade/age levels.

More Information: Full text not available online


Learn about the Adventist Religion Achievement Test administered in several unions of the North American Division of Seventh-day Adventists. In October, 1992 a report was presented to the North American Division Commission on Religious Education. The report summarized the results of the testing for the 20,515 students tested between 1989 and 1992. In the report, items on the test were grouped according to the 27 Adventist Fundamental Beliefs and results were summarized by Belief. In addition, students were grouped according to type of SDA home background and the number of years of SDA schooling. Each item on the tests was analyzed for school effect (did students with more SDA schooling do better than those with less SDA schooling) and home effect (did students with a stronger SDA home background do better than those with a weaker SDA home background). Common misconceptions that students had were identified along with items that showed a negligible or negative home and/or school effect. Recommendations were made for improved practice.

Full text on CD: ReligionAchievementTestReport.pdf


Proficient reading determines the academic success and eventually the future of the school child. Reading is among the important skills upon which other academic learning can be achieved by school children. In the Philippines, reading is an interactive process of getting and making meanings of prints. This process involves the personal characteristics, home environment, and school influences.

The main purpose of this study was to determine the significant child, home, and school
reading related predictors of the sixth grade English reading performance. Employing the step-by-step cluster random sampling, 10 Adventist schools located within the city of Mindanao, Philippines, were selected. From these schools, 335 sixth graders participated in this study. This study is basically quantitative using the descriptive correlational design.

The combined literal and inferential comprehension of the sixth graders as English reading performance was predicted by being a girl ($\beta = .22$ at $p < .001$), having positive attitude towards reading ($\beta = .19$ at $p < .01$), and having a college graduate mother ($\beta = .16$ at $p < .01$). Varied classroom reading events such as teacher direct-whole class instruction, teacher class interaction, answering worksheets independently, and other events being paired with specific skills were also predictors.

It was established by this study that personal characteristics, as well as the home and school environments, are factors of English reading performance of the sixth graders. It is important to note that gender, attitude, mother’s education, and exposure to the varied classroom reading events are significant considerations in the nurture of a school child towards academic success.


Vetne, E. S. (1974). An analysis of the implementation of the nongraded program at the New Port Richey Seventh-day Adventist Elementary School Andrews University, Berrien Springs, MI.

Problem: Seventh-day Adventist schools have long been dissatisfied with the graded school as an answer to educational organization which would be in harmony with the writings as a guideline for Seventh-day Adventist schools. It was the purpose of the present study to determine the attitudes of parents, students, and board members before and after implementation of a nongraded program.

Method: The parents and school board members completed the attitude questionnaires constructed by Gumper (1971, p. 253-257) at the beginning and end of the school year. The students’ attitudes were tested with the Piers-Harris Self-Concept Scale. The results of both of these surveys were tested using a t-test for differences between the beginning score and the end score. The total enrollment in the school for the stud year was 33, and a total of 19 parents were involved in the study. Though not all of the parents and students completed their respective forms, the vast majority in each group returned their survey questionnaires.

Results: There were no statistical differences between the spring and fall results with any of the groups tested. There were slight increases, though, that were not significant.
Conclusions: The attitudes of parents, school board members, and students at the New Port Richey Seventh-day Adventist School were very positive at the beginning of the school year and did not decline during the year. It seems evident that the attitudes toward nongraded teaching expressed here show that nongraded teaching can be utilized to a much greater degree in Seventh-day Adventist schools.

More Information: Full text not available online. Andrews University Library G.S. Th. V588

White, D. S. (2009). A comparison of the academic achievement of Seventh-day Adventist elementary students by school type: The influence of teacher, student, parent, and school variables. La Sierra University.

Enrollment in Seventh-day Adventist (SDA) schools is declining as is the number of schools and teachers. While there could be many reasons for this, one perception of SDA schools, held by parents, teachers, pastors, and school board members, is that students enrolled in schools with one, two, or three teachers do not achieve at the same rate as those in schools with four or more teachers. This study compares the academic achievement of students in grades three through eight in different types of schools (designated by number of teachers) and the interaction of teacher, student, parent, and school variables with school type. Data from the CognitiveGenesis research study, including student, parent, teacher, and administrator surveys and Iowa Test of Basic Skills (ITBS) test results, were used in this analysis.

Results indicated that there were no significant differences in student achievement in reading, science, and social studies among the school types. Students in one-teacher schools had significantly higher achievement than did students in the other three school types in the following areas: language arts, mathematics, sources of information, and the composite score and the effects were consistent across grades three through eight. The differences were small.

There were nine significant interactions between school type and student, parent, teacher, and school characteristics on achievement. In the few areas where there was interaction between school type and student and teacher characteristics, the interaction was relatively small. Seventh-day Adventist educators are encouraged to share the finding that while there were differences in achievement among the four school types, and small schools do as well or better academically than larger schools, these differences were small.

More information: Full text available online

**Problem:** Relatively poor levels of mathematical thinking among American school children have been identified as a major issue over the past half century. Many efforts have been made to increase the mathematics performance of children in schools. Additionally, out-of-school-time programs have attempted to address this issue as well. Holistic development is one of the distinguishing features of Seventh-day Adventist instructional programs. Yet, as of 2007, the Pathfinder program, an informal educational program operated by the world-wide Adventist church, had no instructional product designed to foster participants' cognitive development in mathematics. This study focused on the empirical development of an out-of-school-time geometry curriculum and looked at its impact on mastery of geometric concepts. This program was entitled Geometry in Real-life Application Curriculum Experiences (G.R.A.C.E.).

**Method:** The instructional product development procedure of Baker and Schutz was employed in this study. First the need for an empirically developed geometry education product for Pathfinders was established. Then behavioral objectives were written, based on the standards developed by the National Council of Teachers of Mathematics and geometry education literature. Instructional activities were prepared to help meet each objective and organized in logical sequence. Bloom's Revised Taxonomy served as a resource during initial instructional development. The Baker and Schutz process stipulated that the instructional product undergo repeated tryouts with members of the target population. The development process would be considered complete when a minimum of 80% of G.R.A.C.E. Project participants scored at least 80% on each of the stated objectives. Accordingly, the instructional product was subjected to repeated revision during its developmental stages. Appropriate adjustments were made to eliminate specific weaknesses. Both developer's and participant's manuals were created in their final forms.

**Results:** The completed G.R.A.C.E. Project consists of a developer’s manual, pre- and post-tests for participants, and a participant's manual. The developer's manual covers both relevant content and detailed procedures for project presentation and test administration. The participants' manual presents mathematics content to be mastered by participants. In addition, review questions and answers, diagrams, and charts are included to facilitate mastery of project contents. The pre-/post-test inventory consists of a 25-item cognitive instrument combined with a 20-item affective instrument. After three field trials and revisions of the curriculum, the product was delivered to 25 subjects. These subjects were able to achieve cognitive mastery at the level specified for the 25 objectives. Based on the assumptions of the Baker and Schutz model the percentage difference between affective post- and pre-test scores was expected to be positive, yielding a moderate effect size. However, the average effect size for all four groups was .868, indicating a high impact of program on subjects' interest in and appreciation of
geometry concepts.

Conclusions: This study provided insight into the role of curriculum developers as they engage in the process of empirical development. It also provided a resource for instructors in Pathfinder instructional programs in the Lake Union Conference of Seventh-day Adventists. Other Seventh-day Adventist audiences may also utilize a modified version of the instrument in their instructional programs for Pathfinders.

More Information: Full text available online


Background. Asthma is an inflammatory condition of the bronchial airways. The majority of asthma education interventions target adults and children, while few exist for the adolescent population. Among adolescents, asthma is an important cause of morbidity and mortality. Effective theory-based asthma education interventions, designed specifically for the adolescent population, are needed.

Purpose. This study evaluated the effects of an adolescent asthma education intervention, based in part on social cognitive theory, on knowledge, intention, behavior, self-efficacy, and self-consciousness.

Method. The sample consisted of 87 participants from six middle and/or high schools. The research was based on a nonequivalent comparison group design with delayed intervention in one comparison group. Questionnaires were administered at baseline, at immediate post-intervention, and five weeks after the intervention.

Results. When comparing those in the intervention (n = 51) and comparison groups (n = 36), there were no statistically significant differences found. After collapsing across groups, however, statistically significant improvements from baseline to immediate post-intervention were found for knowledge, intention (when alone), self-efficacy, spacer use, peak flow meter use, and number of days a peak flow meter was used in the past week. In addition, statistically significant improvements were found from immediate post-intervention to five-week follow-up for peak flow meter use and number of days a peak flow meter was used in the past week. Furthermore, statistically significant improvements were found from baseline to five-week follow-up for intention (when alone), spacer use, peak flow meter use, number of days a peak flow meter was used in the past week, and number of days a spacer was used in the past week.
Conclusion. The evaluation of this theory-based asthma education intervention showed the positive impact this curriculum can have on a sample of asthmatic adolescents.

More Information: Full text available online

General Education (7)

Carter, J. (2002). Teacher response to curriculum change in an Australian non-government school system.

The purpose of this study is to identify and analyse the nature of teacher resistance to the introduction of the first three 'God Is Like This' curriculum documents in Seventh-day Adventist schools in Australia. This research is 'Decision Oriented Research', as it is based on a real, practical problem in an educational organisation. It is designed to provide well-researched information to assist the educational leaders to make practical decisions.

The overall methodology of the research is a mixture of quantitative and qualitative methods. The first part of the research, the questionnaire stage, is based on descriptive quantitative methods while the second stage, the interview stage, is qualitative. The outcomes of the first stage were used as the basis for data-gathering in the second stage. The five areas identified as needing more investigation from the quantitative data were: The conflict between a good concept and something worthy of actual change, teacher involvement in the new curriculum, the change agents, apparent contradictions about perceived strengths and weaknesses of the curriculum, and the implementation phase. From these five areas the interview schedule was designed.

The major conclusions reached were: That teachers experience frustration when confronted with major change, that change requires more time and effort than many teachers are willing to give, that teachers often do not have enough information to carry out expected changes, that 'best practice' and teacher 'perceptions' do not always agree, that a national SDA curriculum was welcome to the teachers, that inservice needs to be varied and frequent, and that multigrade teachers perceive greater stresses than others.

The major recommendations arising from the study were the need for: A well structured implementation plan, timely document trialling and document release, appropriate funding and use of funding, professional inservice education, formation of teacher curriculum clusters, and improved accountability.

More Information: Copy available from SPD Education Office

El título de nuestro trabajo es "El itinerario de la educación adventista para la comunidad indígena, en el departamento de Puno", diseñado con los objetivos:
1. Construir, válido para nuestra investigación, un marco geográfico e histórico de Puno, el departamento donde se encuentran dos culturas indígenas.
2. Determinar los hitos culturales en el altiplano peruano, en el contexto de la educación cristiana adventista.
3. Determinar los hitos humanos en el proceso de la educación indígena en el altiplano peruano.
4. Determinar los aportes de la educación cristiana adventista del siglo XXI, en el contexto del altiplano peruano.

Hemos trabajado el diseño de investigación transversal temporal, por la secuencia sucesiva e histórica, con el sentido diacrónico, entendido como la sistematización de los datos históricos en forma cronológica. En este contexto, hemos trabajo el marco geográfico e histórico, los hitos culturales, los hitos humanos y los aportes de la educación cristiana adventista del siglo XXI, dejando constancia de que la bibliografía es demasiado reducida.

Finalmente, hemos llegado a la conclusión de que la geografía del altiplano es muy tormentosa, cuya historia está reducida a la vida plena de dos culturas: quechua y aimara. También hemos determinado que la Fiesta de Candelaria es un hito cultural las culturas referidas, por extensión ha llegado notoriamente a la cultura hispana. Los hitos humanos son: Fernando Stahl, Manuel Zúñiga Camacho y Pedro Kalbermatter. Además la Universidad Peruana Unión tiene una presencia muy significativa para la educación en el altiplano peruano del siglo XXI.


Results of research on the status of home economics in Adventist academies and colleges in North America. Four surveys dealing with the teaching of home economics were sent out. Survey results indicate that the majority of schools no longer require or even offer home economics at the secondary or college level. On the secondary level more and more schools are terminating their home economics classes. Those that do
offer classes teach mainly cooking and sewing. Conclusions and recommendations are offered. This article is from the JAE issue on revitalizing home economics.

*Full text on CD: jae198951030804.pdf*


**Problem.** The purpose of this project was to develop empirically a curriculum to assist Seventh-day Adventist sports acrobatic coaches, physical education instructors, physical education majors and minors to integrate spiritual witnessing concepts into their acrobatics programs.

**Method.** The developmental process of Baker and Schutz (1971) was used to produce and validate the instructional product. First, the content of a curriculum to train Seventh-day Adventist coaches was identified through an examination of acro-gymnastic and witnessing literature. The materials were divided into instructional units, arranged in a logical sequence, and introduced with behavioral objectives. It was established that the product would be successful when 80% of the subjects achieved at least 80% on each objective.

In the developmental process, the product was revised several times. Some units were expanded while others were streamlined. Weaknesses exposed during the tryout stages were corrected and participants' and instructor's manuals were prepared. At the conclusion of the final presentation, the required standard for mastery was attained on all objectives.

**Results.** The instructional product met the established criteria--80% of the subjects reached each objective at or above the 80% mastery level. The witnessing model. During the development of the witnessing model, it was discovered that assurance of salvation is not common among Seventh-day Adventist young people and they are particularly confused about the concept of "God's wrath." They also expressed feelings of not being "good enough" to please God. The impact of the material showing that God is not their enemy gives people hope and good news to which they can witness.

Younger SDA youth responded to the concept that God loves them and desires to take them home with Him. However, at the college level, this concept is much more difficult for them to accept. Obtaining eternal life, to many, seemed to be a "gamble."

*More information: Full text available online*

This study was conducted in an endeavour to highlight the relevance of the outdoor education method for Seventh-day Adventist Christian education programs. The purpose of the study was to formulate a philosophy of outdoor education as it relates to the mission of the Seventh-day Adventist Christian education. In order to formulate the statement of philosophy, an extensive review of literature was made (including both secular and Seventh-day Adventist sources). As a basis for the review, the concepts of outdoor education as determined by Lewis (1975) were used. The philosophy of Seventh-day Adventist Christian education was related to statements on outdoor education by secular outdoor educators. Fifty-six concept statements were derived from the literature survey. By means of a survey instrument a jury (consisting of twelve Seventh-day Adventist educational administrators, outdoor educators and teachers) evaluated each outdoor education concept statement, relating it to the acknowledged Seventh-day Adventist philosophy of education. A 100% return of the survey instrument was obtained. Using a rating scale the jury determined the significance of each concept statement for Seventh-day Adventist Christian education. As a result, a concluding statement of outdoor education was formulated. This final statement was submitted to the educational directors of both the North American Division of Seventh-day Adventists and the General Conference of Seventh-day Adventists (world headquarters) for their consideration. Other outcomes of the study included: an annotated bibliography for Seventh-day Adventist outdoor educators and specific recommendations for the implementation of outdoor education in the Seventh-day Adventist Christian education setting.


*Problem.* Initiating work in the coordination of church music activities has been undertaken in the North American and European portions of the world-wide organization of the Seventh-day Adventist Church. There was a need to develop a comprehensive model of music ministry which the Church could utilize when further steps in the advancement of organized music programs will be taken.

*Method.* In the process of creating the philosophical rationale for the model a descriptive method was used. Adventist literature on music ministry was reviewed, analyzed, and compared with the basic themes of Johansson's contrapuntal design (1984). In the
development of the rest of the model a developmental research design was utilized.

Conclusions. Major conclusions drawn as a result of information and experience gained during the course of the study were:
1. The principles found in the Scriptures provide the basis for the philosophy and practice of music ministry.
2. Creative ability in human beings is part of the image of God. Though weakened as a result of the fall, through restoration in Jesus Christ this ability is liberated, intensified, and sanctified. Individual Christians and the Church as a corporate body have the privilege of nurturing, further developing, and promoting creative talents.
3. Because of its close relationship to human life, music is involved in the basic human dilemma of the conflict between good and evil.
4. Creativity as understood in this study means consideration of universal artistic principles.
5. Music can be seen as a cultural metaphor. This kind of meaning in music is found in the total musical architecture as it relates to human experience in the created world.
6. Mental pictures (compound images) stored in human memory are created through associations. When ideas or behaviors incompatible with Christian values are connected with the gospel content in religious music, a distorted picture of Christian faith is communicated.
7. One of the musical analogues of faith action is the concept of delayed gratification, aspiration toward spiritual maturity. Music can function as a training school for spiritual maturity.
8. One of the major tasks of music in Seventh-day Adventist homes and churches is to express and reinforce the basic theological doctrines of the Church.
9. The successful programs of denominational music ministry share such characteristics as (a) cooperation between administrative levels, (b) adequate communication between pastoral and music staffs and between departments and ministries of the church regarding the philosophy and practice of music ministry, (c) involvement of the spiritual leadership in the formulation and application of the principles of music ministry, and (d) built-in procedures of settling discrepancies related to music ministry.

More information: Full text available online


Problem. Professional and lay leaders in the Seventh-day Adventist church need to be sensitive to the dynamics of faith development as it interfaces with human development over the life span, and with its practical implications. Currently, there is no curriculum available, empirically developed or otherwise, to explore this issue.
**Method.** The underlining philosophy of the approach to curriculum design utilized in this study is that curriculum is likely to be more effective when it is developed in a cooperative spirit between an instructor and learners rather than written in isolation, and when there is emphasis on both the cognitive and affective domains of the learning process.

The product was empirically developed through 10 systematic steps. They included establishing the need for the product, formulation of behavioral objectives, design of the pre- and post-tests for each session, and the process of trial and revision of the instruction and all supplemental materials. General mastery for cognitive domain was established at the 80% level; that is, at least 80% of the subjects would need to achieve the specified mastery of the criteria established for each of the 24 behavioral objectives.

The test for the affective domain was administered and analyzed before and after the series of lectures. In order to complement the objectives of the curriculum in the cognitive and affective domains, a process objective was formulated and outcomes were discussed.

After the sessions with a small number of learners, the curriculum was modified. This process was repeated with increasing numbers of learners until mastery was achieved at the predetermined level.

**Results.** The development included four trials of the curriculum with four groups of subjects. The last group of 35 subjects achieved cognitive mastery at the specified levels for each of the objectives, achieved statistically significant modification of affect as measured by the instrument of affect, and realized the process objective.

**Conclusions.** This empirically developed curriculum on faith development provided an insight into the role of the curriculum developer in the process of empirical development. The product is ready for adaptation by qualified instructors in the Seventh-day Adventist church in North America, or, in an appropriately modified version, with other audiences.

**More information:** Full text available online

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**Tertiary & Seminary Education**  (27)


**Problem**. Cooperative learning is attempted by placing students in group learning situations in which they receive assignments without a structured group or team-formation process. This study evaluated the effectiveness of the Bcube(TM) process with college students as a method of bringing together individuals of varied
backgrounds to form cooperative-learning teams. In addition, the affect of the Bcube(TM) process on a particular learning outcome was also examined.

**Method**. Sixty-three Andrews University students (undergraduate and graduate) were divided into treatment and control groups. After a pretest was administered, the treatment group was given the Bcube(TM) process which is a method of team formation that can be used to support cooperative learning strategies. Then all groups were given a learning task followed by a posttest. The Group Styles Inventory and the Group Development Questionnaire collected information from the 11 groups. Three-way analysis of covariance, three-way analysis of variance, t tests, Mann-Whitney, and Kruskal-Wallace tests were used to analyze the influence of the Bcube(TM) process along with gender and ethnicity on the five treatment groups.

**Results**. The control group scored higher than the treatment group on the posttest of the learning module. The treatment group perceived themselves more effective than the control group. The treatment group used a higher level of constructive group styles than the control group. The treatment group was observed displaying more traits of an effective group.

**Conclusions**. The control group used a centralized communication pattern to outperform the treatment group on the learning module. This supports previous research findings that simple task completion uses individual or centralized communication patterns whereas complex tasks lend themselves to a decentralized pattern. The treatment group perceived that their group worked together effectively to generate better solutions than they could individually, solutions that they could "buy into." This suggests that the Bcube(TM) preparation favorably impacted the treatment group's self-perception. The treatment group's perceived higher level use of constructive group styles suggests that the Bcube(TM) emphasis on practicing cooperative strategies to accomplish taskwork had a significant affect. The observers' ratings and qualitative data concurred that the Bcube(TM) process is an effective classroom cooperative preparation strategy.

**More Information**: Full text available online


Alternative systems of higher education have proliferated in the United States concomitant with an increased demand for accountability and evaluation of the effectiveness of institutions of higher learning. Credibility of alternative degree programs relies on the documented evaluation of the process and outcomes of these innovative methods of education.
The purpose of this project was to determine the equivalence and effectiveness of the on-campus and off-campus programs of LLUSPH. The School's success in accomplishing its mission and objectives was assessed by comparative evaluation of students' initial status, and the structural, process and outcome components of the educational experience, for the two formats. Evaluation procedures employed included six study subprojects: (1) a study of the distribution of grades over an eleven-quarter period; (2) a study of course and instructor evaluations collected over four quarters; (3) a study of the students' personal and academic characteristics over a three-year period; (4) a survey of current students; (5) an alumni survey of graduates over a ten-year period; (6) a knowledge retention study involving four basic public health courses.

The main differences in demographics of the two populations were: the off-campus groups were older by 8-10 years, more likely to be Caucasians and United States citizens, and most were fulltime working professionals. Entering (undergraduate) GPA's of the off-campus groups were lower than those on-campus. A lower undergraduate GPA was negatively associated with the year that the degree was obtained, which reflected the grade inflation that has occurred during the past two to three decades. Students' performance in the school, measured by grades attained and cumulative GPA, was equivalent in the two populations. Quality of courses, curriculum, instruction and the usefulness of program content in the career setting was rated high by both groups, but higher off-campus for several items. Satisfaction with learning in the off-campus format was rated higher by the off-campus group. No difference was found in the amount of knowledge retained for four basic public health courses between students studying in the regular and off-campus formats.

The evidence indicated that the off-campus and on-campus formats are equally effective in providing a quality learning experience. From a review of the literature, it appears this work is the first comprehensive comparative evaluation of the equivalence and effectiveness of an institution's on-campus and off-campus programs. The findings of the project will contribute to the literature on the effectiveness of alternative systems of graduate education and, specifically, public health education.

More Information: Full text not available online


El presente investigación de tipo cuasi experimental, se realizó en la Universidad Peruana Unión - Juliaca, durante el primer semestre académico del 2005, con el
El propósito de determinar si la aplicación de un programa de técnicas de estudio denominado PROLECARSON, mejoraría los hábitos de estudio, principalmente los hábitos de lectura y la optimización del tiempo. La muestra estuvo constituida por 39 alumnos del primer ciclo de contabilidad, matriculados en la asignatura de Técnicas de Estudio e Investigación. Los cuales participaron del programa en el tiempo 11/03/05 - 01/07/05.

Se les aplicó el Cuestionario de hábitos de Estudio que midió:
- DT (distribución del tiempo)
- OL (Optimización de la lectura)
- ME (motivación para el estudio)
- PE (Cómo preparar un examen)
- DE (distractores durante el estudio)
- AC (Actitudes y conductas)
- NC (cómo tomar notas en clase productivas ante el estudio).

La contrastación de las hipótesis se hizo con el diseño de grupo único Pre-Test 'y Pos-Test y los resultados obtenidos a través de tablas y gráficos, así como para los cuadros de prueba antes-después, se usó el Software Estadístico SPSS, teniendo en cuenta los objetivos propuestos.

Las conclusiones mostraron una mejora significativa en los siete hábitos "evaluados, especialmente en los hábitos de lectura y la optimización del tiempo.

More Information: Dirección General de Investigación de la Universidad Peruana Unión (UPeU), http://investigacion.upeu.edu.pe

Casimiro, L. (2009). Effective online instructional design as perceived by teachers and students in selected private colleges and universities. AIIAS, Silang Cavite, Philippines.

The main purpose of this study was to identify effective instructional design practices for fully online courses, and the factors associated with them, in integration of faith and learning (IFL) is practiced. An adaptation of the community of inquiry (Garrison, Anderson, & Archer) approach to instructional design—called the integrated community of inquiry model—formed the analytical framework in determining effective instructional design practices. Using descriptive-correlational research design, the possible factors explored in this study included certain demographics, institutional support, instructional preferences, and individual contexts such as teaching or learning style, attitude towards online learning, motivations for taking or teaching online classes, and satisfaction and achievement.

Respondents were 300 higher education students and 72 teachers from 14 Christian colleges and universities in the United States, Philippines, and Mexico. The online
survey used consisted of 4 parts: the personal information questionnaire, the Online Instructional Design Survey, the Online Learning Context, and the Online Learning Style Inventory for students or Teaching Style Inventory for teachers.

Results showed that effective instructional designs of online courses consist of instructional practices and some related factors that characterize online students and teachers. In the area of instructional practices, this study found that strong teaching and cognitive presences are essential for online courses to be effective. This indicates a collaborative yet teacher-led learning environment. Social presence was deemed less essential while faith presence was considered least important in influencing learning. Among the other factors considered, the positive predictors of effective online instructional design were satisfaction and achievement, institutional support, eclectic teaching style, and use of discussion forums. The negative predictors were interactive course materials, information-focused learning environment, competitive learning style, convenience as teachers' motivation to teach and technical skills as students' motivation to take online classes.

In designing online instruction, this study recommends that teaching presence be felt in online classes and that teachers strive to attain an eclectic teaching style; that course tools be chosen based on their pedagogical purpose and not on their technical qualities; that more collaborative learning activities be used; and that a more intentional IFL be implemented in online classes. Future research should be focused on finding more effective IFL strategies online.


Problem. The four Seventh-day Adventist senior colleges in Inter-America aim at training Christian professionals who will serve the church either directly on its payroll or indirectly as devoted Christian professional laymen. The colleges are doubly challenged to maintain academic excellence while providing spiritual nourishment and commitment. The Bible class is central to this approach to education. Adventist leaders and educators, however, have not given serious study to the questions arising from this practice. No guidelines exist for determining an adequate amount of Bible classes. Each institution sets its own requirements which results in great disparity among them in this regard. No study has inquired whether these courses are appreciated or if they fulfill the spiritual and academic rationales which justify their inclusion in the curriculum in the first place.
Method. This dissertation, since it is philosophical in nature, used the documentary research method. It sought to elaborate, through contemporary literature, a rationale for justifying the presence of Bible classes in College according to Adventist educational tradition and for judging the results of the survey made. Two questionnaires were developed: one for non-theology or non-religion seniors and another for educators. The analyses of opinions were presented using simple arithmetical calculations.

Results. Most college seniors regarded Bible courses as a blessing. Those studying at institutions requiring a greater number of Bible credits did not express less appreciation for their classes. In fact, they seemed more appreciative. Students showed a stronger positive opinion than teachers about Bible classes. Most educators felt they were integrating their subjects with the Christian faith and most students agreed. Students and educators felt strongly that the professional qualifications of Bible teachers needed improvement.

Conclusions. Adventist college educators in Inter-America seem to be committed creationist-supernaturalist-Christians who integrate their subjects with the tenets of their faith. Students seem appreciative of whatever Bible classes they are required to take providing those classes are practical, provide spiritual nourishment, have substance, and are taught attractively and effectively by good Christian models.

More information: Full text available online


En los últimos años las nuevas tecnologías han impactado en general el currículo de las Matemáticas, introduciendo entre otras cosas, software que resulta apropiado para apoyar el aprendizaje y comprensión de los estudiantes sobre conceptos y temas matemáticos que forman parte de sus materias de estudio. Por otro lado, los temas de Derivada como por ejemplo los problemas de optimización son frecuentemente utilizados en la enseñanza de las matemáticas, de cursos básicos de la Universidad, como un tópico importante del Análisis Matemático. El definir la derivada y resolver problemas de derivada por medio de la técnica tradicional pizarra - plumón hace que el problema se vuelva rutinario favoreciendo una visión estática del mismo.

El objetivo central de nuestra investigación es determinar la influencia de la aplicación del Software de GeoGebra en el rendimiento académico de los alumnos del II ciclo académico de la Facultad de Ingeniería de la Universidad Peruana Unión.
En el marco teórico centramos nuestra atención, en los Registros de Representación de Raymond Duval, abordando entre otras temáticas lo referente a los ambientes de Geometría Dinámica aprovechando las características y/o posibilidades de software como GeoGebra en cuanto a la creación de construcciones geométricas y la posibilidad de manipularlas en diferentes registros.


*Problem.* Investigaciones de predictores de éxito en la enseñanza de los estudiantes en la Universidad Perúana Unión (UPeU) han dado resultados contradictorios en general. Además, informes de tales investigaciones no se podían encontrar, relacionados con las Universidades Unión (UPeU). Parecía haber una necesidad de una investigación de predictores de éxito en la enseñanza de los estudiantes en las Universidades Unión (UPeU).

*Method.* El objetivo de la investigación fue observar factores seleccionados e determinar si están relacionados con el éxito en la enseñanza de los estudiantes. Ciento cuarenta y cinco estudiantes que habían completado su experiencia de enseñanza de los estudiantes entre el trimestre de otoño 1977 y el trimestre de primavera 1983 fueron incluidos en la investigación. Los datos se recogieron de los archivos de los estudiantes en cuatro instituciones de estudio de la Unión (UPeU) y se analizaron con los programas de modelos de regresión múltiple. Los resultados obtenidos indicaron que la mayoría de los predictores seleccionados estaban significativamente relacionados con el éxito en la enseñanza de los estudiantes.

*Conclusions.* (A) Ocho de los treinta y uno predictores variables usados en esta investigación estaban significativamente correlacionados con la medida de criterio y parecía que cada uno de ellos podía predecir el éxito en la enseñanza de los estudiantes, individualmente. (B) Cada una de las siete categorías de variables predictivas estaban significativamente correlacionadas con la medida de criterio. Parecen ser predictores de éxito en la enseñanza de los estudiantes. (C) La mejor combinación de variables para la predicción del éxito de los estudiantes consiste en lo siguiente: (1) Eficiencia en la entrega de feedback para los estudiantes; (2) Motivación como profesor; (3) Capacidad para transferir creencias religiosas a la enseñanza; (4) Conocimiento de la materia; (5) Capacidad para establecer un clima de aprendizaje adecuado; (6) Capacidad para determinar las necesidades individuales de los estudiantes y atender a esas necesidades; (7) Presentación de materiales e información; (8) Relación de los estudiantes de los estudiantes con los colegas; (9) Organización y planificación de las lecciones; (10) Capacidad para establecer y mantener el control.

*Recommendations.* Se recomienda: (1) Que las variables predictivas que estaban significativamente correlacionadas con el criterio se den el debido énfasis en la preparación de los estudiantes de la enseñanza. (2) En el entrenamiento de los profesores, se debe dar énfasis especial a la categoría "Habilidades y Competencias de Enseñanza," de la que se seleccionaron cinco de las diez variables en el mejor conjunto. (3) Que los representantes de las Universidades Unión (UPeU)
work together to develop a common set of criteria for the preparation and evaluation of student teachers. This will facilitate data collection for the replication of this study.

More information: Full text available online


Problem. There is a lack of current data by which to evaluate how well the Seventh-day Adventist Theological Seminary's Master of Divinity program prepares its graduates for the actual practice of ministry. The purpose of this study was to: (1) collect data from selected groups regarding how well in their perception graduates are prepared in specific areas and what they perceive ministers need or use most in their daily work, (2) compare the perceived preparation with the perceived need to identify areas of curricular need, (3) summarize the suggestions made by those surveyed, and (4) make recommendations regarding the ministerial preparation of Seventh-day Adventist ministers in North America.

Methods. The Seminary Preparation Survey, an instrument with two seven-point scales, was prepared with instructions modified for each group surveyed. This was given to four populations; faculty, graduates, the major employers of graduates, and students. The resulting data were analyzed and rankings were developed for, needed skill or knowledge, level of preparation, the scores indicating the difference between need and preparation, suggested curricular emphasis, and which items should be required, elective, or omitted from the curriculum. Responses to two open-ended questions were analyzed, categorized, and reported.

Results. The survey dealt with five basic skill and knowledge areas considered to be important for the ministry. There was considerable agreement among the four groups in every area. Of the one hundred and one survey items, fifty-eight dealt with practical pastoral skills, twenty-two with doctrinal/Biblical knowledge, eight with historical knowledge, seven with scholarly skills, and five with the personal life of the minister. Among the fifty top-ranked items that indicated skills or knowledge that ministers need or use most, nineteen dealt with doctrinal/Biblical areas and eighteen dealt with practical pastoral skills. All four groups rated the doctrinal/Biblical knowledge areas as being quite well prepared in comparison to the practical pastoral-skill areas. Rankings based on the scale indicating level of preparation show that seventeen of the top twenty-five items dealt with doctrinal/Biblical knowledge areas, while only one dealt with practical pastoral skills. Of those items that showed the greatest gap between need and preparation, forty-one of the top fifty were practical pastoral-skill areas. This general pattern was repeated in the section of the survey dealing with suggested curricular
emphasis. The open-ended responses were widely varied but two themes tended to dominate all others, these were: (1) the need for a more wholistic program nurturing the person spiritually and personally as well as academically and (2) the need for greater emphasis on practical applications of knowledge and the development of practical skills.

**Conclusions and Recommendations.** Fourteen specific conclusions were drawn to highlight the major trends of the results. Seventeen recommendations were made to those responsible for the seminary curriculum. The recommendations fell into categories, related to: (1) developing a competency-based core curriculum, (2) content areas which need greater emphasis in a competency-based core curriculum, (3) the ongoing development and evaluation of the Master of Divinity curriculum, (4) the internship period, and (5) the personal and spiritual development of the minister and his family.

*More information:* Full text available online


One of the most important concerns of the clergy and the laymen of the Seventh-day Adventist church in Germany is the future of the local congregations. There may be many reasons for the dwindling of a church's attractiveness and relevance in a given situation. One is how the local church lives its organizational life. Adequate church leadership and administration proves to be an important instrument for a healthy development of a congregation. That is why prospective ministers need special training in this field.

It was the purpose of the present study to develop adequate administrational strategies and to apply them to the student body of the SDA Theological Seminary in Darmstadt. This school was viewed as having the potential to play a key role through its graduates in influencing the organizational life pattern of the congregations in West Germany.

The biblical data concerning the church in general and the local congregation in particular, together with insights from the human sciences served as foundation and point of departure for the development of a theory of church administration. This constitutes the first part of the project. The second part concentrates on systems theory as the best suited scientific framework for the content of church administration and on ten relevant action areas in the organizational field of a congregation. The third part is the report of an attempt to implement the gained insights in a teaching situation. The single steps of implementation and the experiences from personal preparation and the work in the classroom are portrayed, analyzed and evaluated.

**Problema.** Surge de la problemática del rendimiento académico en el área de matemáticas a nivel universitario y la necesidad de conocer la relación entre éste y el estilo de aprendizaje de los estudiantes.

**Método.** La investigación fue cuantitativa, descriptiva, no experimental y transversal y se basó en el estudio de toda la población (N = 179). Se aplicó un instrumento de medición, el cual fue validado mediante hallazgos de investigaciones previas. El proceso estadístico se elaboró mediante el software estadístico SPSS.

**Resultados.** No se encontró relación significativa entre el puntaje obtenido en los estilos reflexivo y teórico con el rendimiento académico en matemáticas, pero sí se encontró una relación inversa de éste, con los estilos activo y pragmático. Tampoco se encontró diferencia en el rendimiento académico en matemáticas según el estilo de aprendizaje dominante.

**Conclusiones.** La existencia de una relación inversa entre los estilos activo y pragmático con el rendimiento académico, pareciera indicar la conveniencia de ser reflexivo y teórico para un mejor rendimiento académico en matemáticas.

*More Information: Full text available online*

**Problem.** While much research has been conducted on learning style in the United States, no known empirical study has been done to compare the learning styles of Asian and Caucasian students on Seventh-day Adventist campuses. Therefore, the purpose of this study was to investigate the differences in learning-style preferences between a group of Asian students at Southeast Asia Union College in Singapore and Caucasian students at Andrews University in Michigan.

**Method.** This study employed the Productivity Environmental Preference Scale to measure the learning styles of the two groups. The data which were computed and analyzed to test seven null hypotheses were provided by a total of 309 undergraduate students (143 Asians and 166 Caucasians).

**Findings.** (1) Caucasians appear to have a higher preference for warmth, responsibility, intake, learning in the morning, and mobility. They exhibit a lower preference for auditory and visual learning than the Asians. (2) Males as compared to females have a higher preference for noise, tactile learning experiences, intake, responsibility, and warmth; they have a lower preference for learning in several ways, peer-oriented learning, and persistence. (3) Caucasian males, as compared to Asian males, appear to have a stronger preference for warmth, responsibility, persistence, and intake, and a lower preference for auditory learning and learning in the late morning. (4) Caucasian females have a higher preference for responsibility, warmth, mobility, learning in the morning, and intake than the Asian females; and they have a lower preference for visual and auditory learning experiences.

**Conclusions.** From an analysis of the findings, it appears that culture is a determinant of learning style as Asians are significantly different from Caucasians in their preferences. Sex appears to be a contributing factor as well.

More information: Full text available online


**Topic.** This study focused on the evaluation of the historical development of the religion curriculum at Battle Creek College from its founding in 1874, to its removal to Berrien Springs in 1901. Battle Creek College was the first Seventh-day Adventist educational enterprise. As such, it became influential in establishing the direction of subsequent Adventist education, and the foundation of Adventist educational philosophy.
Purpose. The purpose of this study was to trace the development of the religion curriculum in relation to the purposes and goal statements of the college as they changed from 1874 to 1901, and in relation to the educational implications of Ellen G. White’s counsel. To achieve this goal, the study also necessitated an investigation of the general curriculum of Battle Creek College to provide the background for the development of the religion curriculum.

Method and sources. This was an historical-documentary study based on published primary sources. Secondary sources were used for background, context, and perspective. The most heavily used primary sources were the Battle Creek College annual catalogues located at the Adventist Heritage Center, at Andrews University.

Conclusions. Battle Creek College suffered from a lack of clear direction and unity of purpose. From 1874 to 1901, seven presidents officiated at Battle Creek College. Each president had different notions about the purposes, which in turn affected the form and substance of the college curriculum. From the evidence gathered, this study shows that Battle Creek College did not conform to its original purposes.

From the beginning, and throughout its history, Battle Creek College also faced the problem of effectively integrating faith and learning. The struggle between the classics and the Bible was central to the whole problem, and it was impossible for the college to become a truly Christian institution until this conflict was resolved. The problem at Battle Creek College was that, instead of the Bible, the classics and secular humanism provided the essential foundation and context for the educational enterprise.

More information: Full text available online


For the past 3 decades, retention studies have emerged as being of significant importance to the smaller colleges and universities, especially the private colleges and universities, including Summit Christian college. With the decline in the high-school population, which was predicted to occur in the mid-70s, retention was going to be of even more importance to the smaller educational institutions. All of this pointed toward a time when colleges would have to compete for the high-school graduate in a more aggressive manner. It was possible that unless new ways of coping with the drop-out rate were initiated, a number of smaller schools would go out of business.

The purpose of this study was to identify the relationship between personality types of faculty members and the personality types of students at Summit Christian College and to determine if there is any relationship between faculty personality types and student personality types and student retention. The data for this study came from the Myers-
Briggs Type Indicator and the Please Understand Me test (an adaptation of the Myers-Briggs Temperament Traits test). The tests were administered to all full-time faculty members (M-BTI) employed in 1990 and 1991 and to all new students enrolled in the Freshmen Orientation course in 1990 (PUM) and 1991 (M-BTI). The research was conducted over the 2-year period; there was a response rate of 100%.

The results of the study indicate that the Sensing-Judging, Intuitive-Feeling, and Intuitive-Thinking personality types of faculty members are correlated with the Sensing-Judging, Sensing-Perceptive, Intuitive-Feeling, and Intuitive-Thinking student personality types represented at Summit Christian College in determining which students are more apt to remain in college and which ones are more likely to drop out. The combinations of Sensing-Judging with, Intuitive-Feeling, and Intuitive-Thinking faculty personality types correlate positively with the Sensing-Judging students in retention. No other combination of faculty personality types correlates positively with the retention of the other three student personality types. Recommendations for institutional policy and practice are included in the discussion of the results.

More information: Full text available online


The aim of this study was to know the perception of students concerning the process of teaching-learning, and grading for competency in designating specialties in Food Engineering and Environmental Engineering at the Universidad Peruana Union. This qualitative research was carried out during the first semester of 2008 with 28 students. A model was used that integrated the competencies and essential knowledge, developed according to the Kolb cycle of learning. The questionnaires applied in the
middle and at the end of the semester were open and anonymous. Among the primary reflections, the students mention that they have had difficulties in adapting to the demands of this modality, but it can be summarized with mentioning that the development of the competencies has strengthened their learning and research capacity, forming transversal competencies that allow them to be better professionals.

More Information: Dirección General de Investigación de la Universidad Peruana Unión (UPeU), http://investigacion.upeu.edu.pe

Full text on CD: Matos-Alfredo.pdf


With the influx of low achieving students, institutions of higher education face the problem of underprepared college freshman who cannot read, write, or compute at acceptable levels. Many colleges have implemented developmental education departments to coordinate and promote remedial efforts. The purpose of this study was to analyze the current programs for the underprepared college student at Loma Linda University Riverside (Freshman Seminar class, Black Mentor program, Hispanic Mentor program, Gateway to College, and Freshman Study Support program) and to recommend modifications. A survey of literature identified the programs' components which best contribute to the academic advancement of college freshman.

The research questions and hypotheses applied to the evaluation of the five programs. The research question sought assessment of the results from participation in these five programs in terms of the four outcomes of successful completion of 12 units, cumulative grade point average, attrition, and retention and the relationship of six demographic variables (gender, major, residence, ethnic affiliation, verbal test scores, and math test scores). The null hypothesis for both research questions stated that no significant relationship exists between participation, the four outcomes, and the six variables. All statistical findings resulting in a 0.05 level of probability or lower were determined to be of significance. The literature surveyed proposes that the following should be included in learning support programs for underprepared college freshman: involvement of faculty and staff, diagnosis and evaluation of student needs, mandated basic-skills courses; support services, learning centers, freshman orientation sessions, summer-entry programs, and appropriate funding.

Significant results were found for the attrition and retention in the Freshman Seminar class. More students stayed in school their freshman year and more students returned the following year among those who participated in the program compared to those who did not. Other significant findings for the Black Mentor program and the Gateway to College showed that participation seemed to affect students adversely in successful
completion of 12 units, attrition, and retention.

General recommendations gleaned from this research include exploring the need for minority student programming, the role of financial assistance, and the non-academic factors that affect attrition and retention.

More Information: Full text not available online


**Problem.** This study attempts to determine the extent to which the needs-assessment-based approach to educational planning can be validated and used in planning continuing-education programs for the Seventh-day Adventist (SDA) ministers serving in the Eastern Africa Division (EAD).

**Method.** The sample of the population for this study was drawn from the SDA clergy and a selected group of laity in the EAD. The data were gathered through a two-part questionnaire. The first part sought the demographic profiles of respondents. The second part was designed to enable the respondents to rank each one of the thirty items for preparation and importance. Two questionnaires, one for clergy and one for laity were administered to the respondents by the researcher using a purposive sample. Chi square and medians were computed to determine any significant relationship between groups and cutoffs for preparation and importance of items.

**Results.** The highly significant correlation within and between groups in the way they perceived the importance and preparation of the items support the assumption that a list of needed specific competencies can be found through needs-assessment approach to educational planning and used in the development of continuing-education programs in the EAD. The openness and intelligent participation of all groups in discussing their needs through interviews was a great factor in the support of the assumption.

**Conclusions.** Needs-assessment can be used to determine the role and objectives for continuing-education programs as well as each course taught to meet the needs and interests of learners. The cost of needs-assessment may be justified by its value as a guide in both the development and evaluation of continuing-education programs.

From the data it was concluded that respondents in the study felt they were not well prepared in all the skill and knowledge areas in the instrument. The study also revealed that respondents considered twenty-five of the thirty questionnaire items as "very important" to be included in continuing-education programs. Five other items were considered "important." There were none considered "optional" or "not important"

The purpose of this study was to analyze the appropriateness of several small-scale needs-assessment methodologies in a Central African setting. A needs assessment of the computer science department of a small Christian university in Rwanda, Central Africa, was used as a vehicle for the determination of the appropriateness of the methodologies. More research is needed on using questionnaires in cultures where interpersonal relationships are highly valued.


**Problem:** As the role of home economics continues to be defined and evaluated within Seventh-day Adventist colleges and universities and higher education generally, a clear perception is needed of the purposes and directions of home economics. The purpose of this study was to describe home economics in Seventh-day Adventist higher education, indentifying basic programs available, enrollment trends, and the number of undergraduates for a five year period, 1975-76 to 1979-80.

**Method:** As a part of a larger study on the status of home economics programs in Seventh-day Adventist institutions, the admissions offices and home economics departments of the eleven Seventh-day Adventist colleges and universities provided data of courses offered, the credit value of each course, the number of students in each class, and the number of graduates from home economics programs during the five years studied. Reports from the Department of Education, General Conference of Seventh-day Adventists, identified the total graduates from all programs in these institutions.

This study was designed to examine the total home economics program in Seventh-day Adventist higher education, so data from all schools were combined to obtain a composite description. Information received was coded for five content areas and six
course-type categories. The percentage of increase or decrease in credits offered and earned was then calculated. Also, the percentage of home economics graduates was compared to the total number of undergraduates from all programs in all North American Seventh-day Adventist colleges and universities.

Findings: Overall, Seventh-day Adventist colleges and universities maintained stability in credits offered in home economics programs from 1975 to 1980, but there was a decrease in both credits earned and in degrees granted during the five years studied. Enrollment per credit hour taught decreased over the five years from an average of twelve students in 1975-76 to an average of ten students in 1979-80. More total home economics degrees were granted in 1979 than during any of the other five years. Compared to undergraduate degrees offered in all programs in Seventh-day Adventist higher education, the percentage of home economics undergraduate degrees granted decrease slightly, dropping from 6 percent in 1979 to 4 percent by 1980.

Conclusions: The findings suggest a trend toward a slightly declining enrollment in home economics programs. This trend needs further study since government reports suggest an increased demand for graduates of higher education in home economics throughout the eighties. Also, with the reorganization of some college departments, home economics as a discipline for academic study could lose the integrative approach necessary for understanding human needs in relation to the environment; therefore, careful attention must be given to curriculum development in Seventh-day Adventist higher education.

More Information: Full text not available online. Andrews University Library G.S. Th. M984

Musvosvi, A. N. (1986). A curriculum model for home economics at Solusi College Andrews University, Berrien Springs, MI.

Purpose: This study was conducted to determine the needs of Zimbabwean families in household management so as to develop a home economics curriculum for Solusi College.

Method: Home economics syllabi from the University of Cambridge Overseas Syndicate were analyzed to determine content material expected of Ordinary Level candidates. Gweru Teachers’ College and Andrews University home economics programs were analyzed for establish courses offered at college level. A survey was made of home economics teachers in Seventh-day Adventist schools in Zimbabwe to determine opinions on course content considered valuable to college teachers.

Findings: According to the findings of this study, Zimbabwean families need education that can improve the quality of their family life in the areas of nutrition, child care,
resource and household management, and health. Therefore, in developing a curriculum for Solusi College, an attempt has been made to include those courses that meet the needs of the people of Zimbabwe.


**Problem.** The proportion of international students in the doctoral programs, School of Education at Andrews University, raises concerns over (a) the ability of the programs to meet the varied expectations and needs of the international and American students and (b) the relevance of the students' academic preparations to their careers. Possible differences between the international and American doctoral graduates’ appraisals of their programs were investigated.

**Method.** This ex-post facto study obtained data from two sources: AU's records and the graduates' responses to survey questionnaires sent to 143 of the 151 doctoral graduates with known addresses. A 72.7% return rate was attained. Chi-square statistical analyses were conducted on 235 items to test four null hypotheses. Alpha was set at .05.

**Results.** The background information revealed that there were more international graduates (52.7%) than American graduates (47.3%); 80.8% were men; most (90.1%) were Seventh-day Adventists; and 79.5% received the Ed.D degree. Only 31 of the 235 items were statistically significant.

**Conclusions.** (1) International doctoral students attend AU mainly because it is an Adventist institution; American students choose to attend because of geographic proximity. (2) The doctoral programs were compatible with the pre-arrival expectations of the graduates. (3) Graduates were generally satisfied with their programs and rated favorably the faculty, facilities, quality of instruction, dissertation writing process, and the programs' contributions to acquired competencies. (4) American graduates perceived the School of Education as catering adequately to the needs of the international doctoral students. International graduates were less inclined to agree. (5) In terms of professional development, the graduates benefited most from dissertation work, course work, relation to major professor or director of dissertation, and independent reading. They benefited least from relationships with other students, preparation for examination, graduate and research assistantships. (6) The majority were satisfied with the relevance of their academic preparations to their professional careers. (7) The high percentage of international doctoral students in the School of Education appears to have little negative
impact on their programs or the Americans' perception of the programs. (8) The minimal number of differences between international and American appraisals may be largely due to two common factors: their Adventist backgrounds and current employment with the Adventist denomination.

More information: Full text available online


**Problem.** Various guidelines for assessment have been developed in an effort to promote academic quality and integrity for educational programs that recognize experiential learning. The purpose of this present study was to determine the extent to which experiential learning and assessment, through portfolio development, help adult students in a graduate-degree program demonstrate graduate-level learning and competency.

**Method.** This qualitative single-case study used the assessment processes and outcomes elements of the Jackson and MacIsaac process model to analyze the use of reflective practice and the use of portfolios in a graduate education program. Data were triangulated using individual interviews and the analysis of portfolio artifacts, attestations, and documents including reflective and synthesis papers.

**Results.** The participants' perspectives of the portfolio as an experiential learning and development tool changed during the portfolio-development process. Each participant shifted from a belief that a portfolio represents experiences, to a belief that a portfolio coupled with reflection represents experiential learning. The process of theoretically informed written reflection allowed the participants to move beyond descriptive accounts of experiences to analyze, assess, interrelate, and synthesize their experiences in relation to their graduate-level learning and competency.

**Conclusions.** Successful demonstration of graduate-level experiential learning when using a portfolio requires reflection that includes a description of the experience, linkage to the relevant theoretical constructs, and the application of the learning.

More information: Full text available online

En el presente trabajo se ha demostrado en qué medida el módulo de aprendizaje basado en el método comunicativo influye en el rendimiento académico de los alumnos de Básico I de la Institución Educativa "Unión". El primer capítulo de este trabajo define el problema, los objetivos tanto general como específico. Donde el objetivo general de esta investigación ha sido determinar el efecto de la aplicación del módulo de aprendizaje del inglés basado en el método comunicativo.

En el segundo capítulo mencionó los fundamentos teóricos, la caracterización del método de enseñanza, el módulo de aprendizaje y finalmente el marco conceptual que sustenta la investigación.

En el tercer capítulo se exponen claramente los aspectos metodológicos de la investigación. Se empezó haciendo una encuesta, seguidamente se tomó el pre-test a los dos grupos: básico 1 "A", constituido por 30 alumnos que representa el grupo control y el grupo experimental constituido por 31 alumnos de básico 1"B". Se aplicó el módulo de aprendizaje que consta de 3 unidades, aplicándose las pruebas intermedias al término de cada unidad y finalmente se tomó el post-test a ambos grupos. El presente trabajo de investigación se realizó durante los meses de agosto a diciembre del 2006.

En el cuarto capítulo se expone el análisis de los resultados obtenidos. Al término de este capítulo se concluye que la aplicación del módulo de aprendizaje basado en el método comunicativo incrementa el rendimiento del inglés de los alumnos de básico I de la Institución Educativa Unión.

More Information: Dirección General de Investigación de la Universidad Peruana Unión (UPeU), http://investigacion.upeu.edu.pe


Purpose. The purpose of this study was to investigate the contribution of teacher preparation areas (student teaching, methods courses, early field experiences, major field of study, and other courses in education) to the development of professional competencies as perceived by Central American Union Seventh-day Adventist College (CADES) graduates from 1981 through 1984. The study also investigated the extent to
which teachers perceived they possessed selected competencies listed in the survey instrument. Graduates surveyed were also requested to evaluate the adequacy of their orientation in teacher preparation areas.

**Procedures.** Data were gathered by survey questionnaires from graduates from CADES' teacher preparation program. From a total population of 80, 78.8 percent usable questionnaires were returned. Statistical procedures used to analyze the seven hypotheses of this study included ANOVA, t-tests, and correlation matrices. Descriptive statistics such as frequencies and means were also used. Hypotheses were accepted at the .05 level of significance.

**Findings.** A difference was found to exist among the teacher preparation areas in their contribution to the development of professional competencies within competency categories (planning and organization, instructional techniques, spiritual integration, classroom management, and professional growth). Graduates perceived student teaching as contributing most to the development of professional competencies. Graduates rated methods courses second in value of contribution; early field experiences, third; major field of study, fourth; and other education courses, fifth. Graduates rated their competency in all categories as good to excellent. Most respondents rated themselves as excellent in spiritual integration; following next in respondents' self-rating was planning and organization. No one perceived himself as being very poor in any of the competency categories. The majority of graduates rated the adequacy of their orientation in their teacher preparation as good. Student teaching was the area in which the highest percentage of graduates rated themselves as excellent. Secondary education graduates perceived their preparation in major fields of study as less effective than their preparation in other areas.

**Conclusions.** Following are some conclusions drawn from the findings: (1) Graduates credit the teacher preparation program at CADES with contributing substantially to the development of their professional competencies; and (2) Secondary education graduates are not satisfied with the contribution of their major fields of study to the development of professional competencies. (Abstract shortened with permission of author.)

*More Information:* Full text not available online


**Purpose.** The purpose of this study was to determine the status of planning in SDA colleges and universities in the United States, and also to determine if significant relationships existed between planning in small and large institutions and between administrators' and department chairmen's perceptions of institutional planning.
Procedure. Questionnaires were mailed to administrators and department chairmen in the 11 SDA colleges and universities in the United States. Of the 362 questionnaires mailed, 235 provided data for this study. The data were analyzed using chi-square tests, t-tests, frequency distributions, and means.

Findings. A significant difference was found between planning in small and large institutions. No difference was found between administrators' and department chairmen's perceptions of SDA institutions' mission statements. A significant difference was found between administrators' and department chairmen's perceptions of the overall planning of SDA institutions.

Conclusions. The major conclusions of the study are: (1) All 11 institutions practice formal planning, but just over one-half, primarily larger institutions, practice long-range and strategic planning; (2) Comprehensive planning in SDA institutions is in the early stages of development; (3) Plans for enrollment, income, and management information need greater attention; (4) Most institutions have performed mission statement review within the past five years; (5) Presidents, vice-presidents, and academic deans have the largest involvement in the formulation of institutional goals and objectives; (6) SDA institutions generally use an object-program budget or a strict object budget; (7) Institutions rely mostly on informal procedures to evaluate the attainment of institutional goals and objectives.

Recommendations. Administrators of SDA institutions should: (1) undertake comprehensive, long-range, strategic planning; (2) take deliberate action to communicate the mission of the institution to every faculty and staff member; (3) provide more opportunity for wider participation in the planning process; (4) implement a decision support system or a management information system; (5) review their plans for income and enrollment; (6) implement a program budget or a zero-based budget; (7) give due consideration to political and governmental matters; (8) develop formal evaluative procedures; (9) cooperate in system-wide planning.


The purpose of this study was to determine, through action research, the effects of instruction on graduate English Second Language (ESL) student academic writing at the Adventist International Institute of Advanced Studies (AIIAS).

Models and trends in second language acquisition were examined for purposes of informing the action research project, and implementing within an academic writing
course. Interviews with professors in the Theological Seminary and the School of Graduate Studies provided insight into the difficulties and needs of ESL writers.

A 32-hour writing class was conducted over an 8-week period, in which fifteen students new to graduate studies volunteered to participate.

Assessment as made of students’ writing tasks throughout the course, and results were compared in order to gauge progress in writing in terms of the Structure of Observed Learning Outcomes (SOLO) Taxonomy. The Michigan English Language Assessment Battery (MELAB) was used as a pre- and posttest, and scores in the areas of grammar, Reading Comprehension, and Composition were compared to determine progress by students. Student journals offered further insight into student perceptions of their own needs and progress during the writing class.

Findings revealed the greatest difficulties of ESL writers to be in the areas of grammar, vocabulary, critical thinking and organization. The greatest needs included instruction in writing, continuous help in writing, and more reading in the disciplines.

It was also found that instruction improves student academic writing. Analysis of student portfolios showed an overall improvement in cognitive skills. Analysis of Michigan pre- and posttest compositions showed that most students advanced at least one level in cognitive complexity according to the SOLO Taxonomy, and that most students improved their composition scores on the Michigan posttest.

The researcher proposes that starting/continuance of an academic writing course in graduate institutions where English is the medium of instruction, and where students are from non-English speaking backgrounds. It is also recommended that teachers in content areas give students regular feedback, not only in the content of their courses but also in academic writing, so that students can recognize the need to continue striving for excellence in this area.


Problem. In Colombia and Venezuela the number of students demanding higher education commonly surpasses the capacity of their educational systems. Furthermore, the academic programs may not match the occupational needs of the region. When academic planning occurs without systematic needs assessment, resources are wasted and graduates are ill-prepared for the labor market.
The subjects. The subjects included senior high-school students attending SDA institutions, teachers serving those schools, the students' parents/representatives, school and church administrators, and SDA members within Colombia and Venezuela.

The method. A design for needs assessment was developed upon the implementation of a Data Flow Diagram (DFD) as used in systems analysis to design pertinent computer programs. Using this design, information was secured from a variety of sources to provide approaches for academic planning in the Colombia-Venezuela Union.

Findings. (1) Occupation preferences of sample SDA respondents matched the preferences of each country's larger population; differences in preferences were observed between the two countries. (2) Significant positive correlations were observed in the occupational preferences of adult groups--parents, teachers, and administrators. (3) Occupational preferences of adult groups, failed to match career preparation provided for in the master plan of Corporacion Universitaria Adventista. (4) Occupation preferences of students and adult groups were only partially compatible with the officially documented needs of the labor market. (5) In both countries students tended to prefer careers related to technology. Preferences for social areas were more prevalent in Venezuela, artistic areas in Colombia, but neither was strong. (6) Occupational preferences of students failed to realistically consider their financial capacity to participate in career-preparation programs.

Conclusions. (1) The Colombia-Venezuela Union of Seventh-day Adventists should examine its Educational program offering to address the needs and opportunities of the labor market. (2) Students' occupational preferences matched the traditional and frequently irrelevant preferences of their adult counterparts. (3) CUA Academic Master Plan needs to be re-designed to reflect current and future demands of the labor market. (4) Administrative involvement is crucial in securing institutional commitment to the needs-assessment process.

Implications. The Educational system of the Colombia-Venezuela Union should be revised to reduce mismatch between traditional offerings and the growing demands of a developing society. Needs assessment may assist in reducing the gap between academic training and the labor market.

More information: Full text available online
En el mundo actual, la tecnología empieza a jugar un papel importante en los procesos de aprendizaje. Esto nos obliga a reflexionar sobre los elementos involucrados en su uso y a buscar nuevas formas de enseñar y de aprender eficientemente en la vida universitaria, por esta razón se plantea el objetivo principal de la investigación de comparar el nivel de aprendizaje de las probabilidades en la enseñanza presencial tradicional y la enseñanza presencial con aula virtual.

En la enseñanza presencial tradicional el pizarrón y la tiza son los medios fundamentales, la clase se desarrolla dentro de las cuatro paredes en un horario determinado, la tutoría que realiza el profesor es voluntaria y muy esporádicamente, los exámenes por lo general son un conjunto de preguntas; En la enseñanza presencial con aula virtual, se desarrolla entre las cuatro paredes del aula, además se utiliza la tecnología de información y las comunicaciones, para administrar los contenidos que son colocados en internet que permiten su consulta fuera del horario del clase, además el alumno avanza de acuerdo a su ritmo de aprendizaje, los exámenes por lo general es un conjunto de preguntas.

El diseño de investigación es cuasi experimental, un grupo control, alumnos de administración que obtuvieron un promedio de 13.21 con una desviación estándar de 1.23 y el grupo experimental, alumnos de contabilidad que obtuvieron un promedio de 14.39 y una desviación estándar de 1.92 siendo los dos grupos homogéneos.

Para el análisis se utilizó el programa SPSS 15 y la prueba t de student para muestras independiente, con un nivel de significancia de 0.05, con ello concluimos que la enseñanza presencial con aula virtual es mejor que la enseñanza presencial tradicional.

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