

## Proposing a Pre-service Teacher Training Program for the Gifted Education

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**Abstract:** Since 1998, an elementary teacher education institute in Korea has hosted the center for the gifted education. The institute hired undergraduate students to escort and liaison each class of the gifted student participants with assisting classroom activities. These liaison teachers observed the gifted classroom activities and evaluated them by using a given checklist and filling out pre-made evaluation forms. Currently this system is being transferred from part-time jobs for students to earn allowance into well organized pre-service teacher program focusing on the gifted education. In other words, the purpose of system is being shifted from how liaison teachers facilitate the gifted program to how the system helps the liaison teachers to be quality teachers for the gifted who can understand what the gifted are and how to facilitate them. Analyzed were the self reports of the liaison teachers regarding their perceptions and beliefs of the gifted and their education program. It was found participant liaison teachers purposed to have more live experiences with getting along with students as well. Liaison teachers' perceptions on establishing a gifted teacher professional education sequence were reported in this study. The potential scaffolding of the pre-service teacher education program model of the gifted education was provided as a consequence of this study.

**Keywords:** pre-service teacher program for the gifted education, crossing borders, liaison teachers

### Theoretical Perspectives and System Context

The gifted education has been paid a great attention to since the Korean educational policy incepted the act for the gifted education in the year of 2000. While gifted education programs are developed, and adopted, teacher training programs have also been designed and tried. But, such intended teacher training programs have been exclusively for in-service teachers. Pre-service teachers are given limited opportunities for experiencing a variety of subordinated research and field works in the education including the gifted education. Establishing professional education sequence will help to prepare for competitive teachers. This study promulgates the earlier preparation for the pre-service teacher programs for a gifted education.

This study proposed the feasible pre-service pro-

gram model for the future teachers of the gifted. Its major procedural structure of the program is designed with scaffolding of Iowa Chautauqua Staff Development model which is an in-service model designed to assist teacher in changing their goals, curricula, and teaching strategies. The history and state of liaison teacher system would be described in the following sections after depicting of the exemplary characteristics and competence of the gifted teachers and what the Chautauqua model is and why it is eligible to develop the pre-service training model for the gifted education.

#### Iowa Chautauqua Program (ICP): Professional Staff Development Model

The ICP is a teacher professional development model designed to improve science teaching and learning through studying and practicing constructivist approaches to science education. Since its inception in 1983, the ICP has operated in 17 U.S. states and assisted K-12 science teachers in reforming their classrooms. A number of studies documented that the ICP has been successful in enhancing sci-

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ence teaching practices and producing better student performances (Blunck, 1993; Iskandar, 1991; Liu, 1992; Lu, 1993; Mackinnu, 1991; Yager et al., 1997; Zehr, 1991). The ICP's success helped in its recognition and validation by the U.S. Department of Education as an excellent model for dissemination across the nation (Eisenhower National Clearinghouse, 1999).

The ICP is a powerful catalysis for improving teachers' classrooms. The main idea of the project is "bottom up" type of reform movement. Most reforms were prepared and directed by the government. As a result, what teachers want to learn was not be reflected in designing workshop programs and the consequence has been half-finished reform. The ICP was spotlighted by its efforts to make the in-service teachers workshop focus on teachers' reforming their teaching behaviors and environments by "learning by doing" (Shin and Oh, 2003).

The ICP consists of intense and continuing efforts over multiple years. Especially, the annual sequence of the ICP was employed as a model when this study tried to build a pre-service program model for better facilitating the gifted education program. Such original features are as follows:

A two-week leadership workshop for lead teachers, curriculum developers, and area scientists, who become part of the instructional team for the following workshop involving science teachers who are interested in the current reform effort.

A three-week summer workshop, where the enrolled science teachers study new approaches to teaching and learning science and then plan five-day lesson modules for use with their own students in the fall.

Teaching the five-day module soon after schools open in the fall.

A three-day fall short course, which is intended to review the teacher experience with the five-day module and to develop a month-long module with extensive assessment plans.

A series of interim communications, which include newsletters, special memoranda, monthly

telephone contacts, and classroom visits by lead teachers and regional staff.

A three-day spring short course, where the teachers report and reflect on their experiences with the month-long modules and the associated assessment results.

The sequence above is often repeated over a three-year cycle with the teachers who were initially enrolled as mentors for other teachers in their schools and districts. Thus, the ICP is characterized by the involvement of lead teachers as part of its instructional team, use of new curriculum modules in classroom practices, and ongoing support for science teachers to achieve science classroom improvements (Dass, 1997). Considering these features, it is suggested that preparing quality teachers for the gifted should be a long-term training course and occur in the real classroom through interacting with the gifted.

#### Exemplary Teachers of the Gifted

Good teachers of the gifted should be gifted, which aids understanding, empathy, and communication. Beyond this primary qualification, many experts have proposed other characteristics of effective teachers of the gifted. Davis and Rimm (2004) suggested what exemplary teachers of the gifted in terms of characteristics and competencies. Both would be considered in designing training programs for teachers. At first, the representative characteristics of teachers for the gifted are:

- They are enthusiastic about giftedness, talent, and learning.
- They are aware of gifted students' needs.
- They are patient, sensitive, respectful, and empathic; they understand and see matters from students' points of view.
- They recognize individual differences, including personal self-images and personal integrity.
- They create a vibrant, warm, safe, and democratic learning environment.
- They align more closely with gifted students than do more formal teachers.

- They are willing to learn with and from students; are perennial students themselves.
- They seek new solutions through continued learning.
- They can work closely with other members of gifted staff, students, parents, and other professionals.
- They can communicate the needs of gifted children and muster support for the gifted program.

Most characteristics in the above would apply to all good teachers. More than that, teachers for the gifted need to have and prepare more for competencies, skills, and knowledge than personal traits. According to Davis and Rimm (2004), the representative competencies of exemplary teachers for the gifted are:

- They can select or develop methods and materials for use with gifted students.
- They are skilled in teaching higher-level thinking skills, including creativity and problem solving.
- They can facilitate independent research and other projects.
- They guide and facilitate learning, but do not coerce.
- They can work with culturally different gifted and talented students.
- They are skilled in counseling gifted and talented students.
- They can skilled in group processes; teaching groups.
- They motivated students to strive for high achievement, successful accomplishments, and general excellence.

Teachers of the gifted have such traits as high enthusiasm, broad knowledge, maturity, and willingness to work with other staff. The teachers of the

gifted should also have competencies which include knowledge of the gifted and the abilities to teach higher-level thinking skills, direct research and individualized learning, and counsel gifted students. Most of such characteristics and competencies are related to teachers' behaviors. These behaviors are not learned solely from a certain periods of lectures and workshops. Rather they can be achieved by training in actual classrooms and experiences with the gifted children even for longer period of time. Lewis (1982) reported such affective aspects of gifted teachers in transcribing what gifted students said about teachers of the gifted. He transcribed as the difference between a normal teacher and a gifted teacher was that a gifted teacher is very much like her kids. In this sentence, "being like her kids" does not mean only high intellectuality of teachers but also teachers accommodate and share the culture of the gifted rooted from understanding and long-term experiences with being with the gifted. The liaison teachers may well be said to have already started the pre-service training for being gifted teachers.

#### System Context

Since 1998, the liaison teacher system has been only treated for facilitating the gifted education program, never for the participating liaison teachers. That is, the undergraduates in the teacher education program were hired to take care of the gifted students who enrolled in the gifted education institute. Their roles are two folded: 1) Facilitating and assisting the gifted classes by preparing teaching materials and experiments setting and helping lecturers to work with the gifted properly. 2) Observing and evaluating of each student's performance and taking care of the gifted like a home-room teacher. The liaison teachers worked on the better gifted

**Table 1.** The statistics of student enrollment at the gifted education institute

Year	1998	1999	2000	2001	2002	2003	2004
Middle (NSI): 7 <sup>th</sup> and 8 <sup>th</sup> gr.	39	20	91	103	120	144	111
Elementary (NSI): 3 <sup>rd</sup> and 6 <sup>th</sup> gr.	86	162	115	105	86	83	112
Total Number of Student Enrollment	125	182	206	208	206	227	223

**Table 2.** The number of the liaison teacher who participated in the gifted education programs

	1999	2000	2001	2002	2003	2004
Total Number of the Liaison Teachers (Undergraduates)	20	24	35	36	44	50
Ratio Per Students	6 to 7	7 to 8	5 to 6	5 to 6	5	4 to 5

education program rather than for their own development as pre-service teachers.

Table 1 and 2 showed the number of students and liaison undergraduate students at the gifted education institute from the first year of 1998 to the current year of 2004. This institute is for the gifted students of grade 5 to 8 as again they are divided into two programs of elementary and middle-schoolers. The number of students per a liaison teacher was found to decrease from 7 to 4. In other words, 4-5 gifted student participants were monitored with a focus on their behavioral aspects and cognitive domain, and assisted during their works in the program by a liaison teacher. The liaison teachers were also paid from the institutes for their work as their assistantship.

The institute recognized that this system was intrinsically involved with the liaison teachers' growing to be quality teachers with in-class experiences provided in the gifted education program. The liaison teachers can have better learning experiences of the gifted education more than the current in-service teacher workshops can serve because they are said to "learn how to teach the gifted by doing" just in a way that most researchers of professional staff development commonly insist. This study proposed to shift the liaison teacher system into the pre-service training program for the gifted education. For doing this, the research focuses on 1) how do liaison teachers perceive the gifted education from their experiences of working with gifted students? 2) how do liaison teachers consider the plan of establishing

the pre-service teacher training program? and 3) what is the feasible model of the pre-service teacher training program model by modifying the current pre-service teacher training program based on descriptive analyses of participant liaison teachers' self reports on their beliefs and perception of the gifted education.?

## Method

This study is a descriptive and explorative study in which two procedures were involved; the first step was collecting liaison teachers' perceptions of participating in a gifted education program and identifying the necessity of establishing the pre-service training program through transferring the liaison teacher system; the second step was analyzing and adopting the ICP for establishing the pre-service training program for the gifted education based on the current liaison teacher system.

### Subjects

A total of 30 liaison teachers responded the self-report inventory. Most of participants had more than 6 month-long experiences with the gifted students. Table 3 presents information of the subjects administered with this questionnaire and descriptive analyses of them.

### Data Collection and Instrument

In the first step of data collection, it was a goal to learn about liaison teachers' perceptions of the

**Table 3.** Information of the subjects (N=30)

Gender	Grade Level	Length of Experiences of Liaison Teachers	Grade Level of Students in the Gifted Education Program
Male: 5	Sophomore: 6	6 months: 20	Elementary : 10
Female: 25	Junior: 19	18 months: 10	Secondary: 20
	Senior: 5		

**Table 4.** Questions in the self-report inventory used

Category	Questions
Perception of Participating the Gifted Education Program	PG1. What is your motivation of applying for the liaison teacher? PG2. What is the most difficulty when you work as a liaison? PG3. What benefit do you expect from your experience of a liaison teacher? PG4. What is your definition of role of a liaison teacher? PG5. Have you learned the general theory of the gifted education?
Needs Assessment for the Pre-service Training Program	ND1. Who do you think will be the target group of the program for the gifted education teachers, if you consider the effectiveness of the program? ND2. If there is a pre-service teacher training for the gifted education, will you apply for it? ND3. How do you think of transferring the current liaison teacher system into the pre-service training program? ND4. If you have systematic knowledge about the gifted education through the professional training program, what will be good for you and your career? ND5. Will you be involved with the gifted education program after your graduation?

gifted and the gifted education program and the pre-service training program for the gifted education. For doing this, the self-report inventory was developed and used. Table 4 shows the questions in the questionnaire prepared as a self-report inventory regarding the gifted education as well as modifying and reforming the liaison teacher system. The inventory was an open-ended and essay style of questionnaire. The inventory was divided by three categories:

The responses of the participating liaison teachers were clustered by considering their expressed perceptions concerning their experiences with the gifted education program. The data from this analysis were used as rationales for building up a pre-service training program.

In the second step of this study, the annual procedures of the ICP and liaison system were analyzed to select the representative features. The selected features were compared with those of the current liaison system. Then, with supplementing the missing ICP elements in the liaison system, a training model for pre-service teachers was developed. The target liaison system for the analyses is one of the year of 2003.

## Results and Discussions

### Pre-service Teachers' Perceptions of Their Works and Impediments as Liaison Teachers

Thirty liaison teachers responded to the self-report inventory regarding the gifted education and the pre-

service teacher education program. Their responses were clustered into two or three categories for each question (see Table 5). Several interesting findings for discussion were presented under the two major categories of the self-report inventory.

Why did pre-service teachers apply for the liaison teacher? From the survey of this research, we found two reasons: The first reason (50% of students) was for building up professions in gifted education, i.e., adding one line in their resume to make them better; the second (47%) for just having more teaching experiences before being an in-service teacher. This implicates that participating pre-service teachers perceived that the liaison teacher system might be able to give them real experiences in teaching either the gifted or the normal or both. Also the question of what they expect from the experiences as a liaison teacher was "getting some help for border crossing as a future teacher (77%)":

I have been a liaison teacher for 6 months. I learned much more about what teaching looks like from this experiences than from college courses (Subject 4).

It confirmed that pre-service teachers viewed the liaison system as a kind of student teaching experience which could expand into the gifted education. Only 17% of students emphasized solely on the gifted education by focusing on the importance of the teaching internship over the gifted education. The basic literacy of being a liaison teacher is inter-

**Table 5.** The overall result summaries of self-report inventory (N=30)

Major Responses(percentage)	
PG1	<b>I became the liaison teacher for</b> <ul style="list-style-type: none"> <li>- having interest in and wanting to build up professions in the gifted education (50%)</li> <li>- wanting to have more teaching experiences because the liaison is a kind of student teaching (47%)</li> <li>- having fun and stipends (3%)</li> </ul>
PG2	<b>The most difficult thing in working as a liaison teacher is</b> <ul style="list-style-type: none"> <li>- observation and evaluation of the gifted students without knowledge of the gifted(50%)</li> <li>- manage the class and control students as a liaison (33%)</li> <li>- facilitate class (17%)</li> </ul>
PG3	<b>What I expect from this experience of the liaison teacher is</b> <ul style="list-style-type: none"> <li>- getting some help for border crossing as a future teacher/learning how to manage students in general (77%)</li> <li>- having a opportunity to learn more about gifted students and program (17%)</li> <li>- learning to think just like gifted students(6%)</li> </ul>
PG4	<b>The role of the liaison teacher is</b> <ul style="list-style-type: none"> <li>- helping the gifted learn better, facilitate the program and guiding them (73%)</li> <li>- Finding students' giftedness through skilled observation and evaluation (26%)</li> </ul>
PG5	<b>I had a chance to learn about the theoretical and systematic information of the gifted education</b> <ul style="list-style-type: none"> <li>- Yes I had (53%)</li> <li>- No I haven't (47%)</li> </ul>
ND1	<b>The target group of the gifted education teachers program would be</b> <ul style="list-style-type: none"> <li>- In-service teacher (17%)</li> <li>- Pre-service teacher (17%)</li> <li>- Both (67%)</li> </ul>
ND2	<b>Will you apply for the pre-service training program for the gifted education?</b> <ul style="list-style-type: none"> <li>- Yes (93%)</li> <li>- Not sure (7%)</li> </ul>
ND3	<b>I think transferring the current liaison program into the pre-service teacher training program is</b> <ul style="list-style-type: none"> <li>- Very good plan (90%)</li> <li>- Not necessary (3%)</li> <li>- The program for the lecturer is more urgent (3%)</li> <li>- Don't know (3%)</li> </ul>
ND4	<b>If I have systematic knowledge about the gifted education, I will</b> <ul style="list-style-type: none"> <li>- do better job as a liaison teacher to facilitate class and find students' giftedness through skilled observation (77%)</li> <li>- be a better teacher with professions in the gifted education / make my resume look better (23%)</li> </ul>
ND5	<b>I have a plan for involving myself in the gifted program after being a practicing teacher</b> <ul style="list-style-type: none"> <li>- very much (17%)</li> <li>- probably (67%)</li> <li>- not sure (16%)</li> </ul>

esis of the gifted education. The institute presumed that the pre-service teachers applied for liaison teachers from their interest of the gifted education and the gifted. From the liaison teachers responses, however, it was learned that applicants for liaison teachers put more emphasis on "having in-class or student-teaching experiences" than on the gifted education.

How liaison teachers perceive their roles? Most participants (73%) responded that they played role to help the gifted learn better. The response of "playing a role of skilled observation and evaluation of the gifted" was found in 26% of participant pre-service teachers. It is worthy of noting that the institutional needs of the liaison teacher is having

them observe and evaluate the gifted students in order to find the giftedness of the gifted students more effectively. The liaison teachers viewed their roles as facilitating the classes. But observation and evaluation of the gifted took the institute's priority among roles of liaison teachers. The institute and the participant pre-service teachers were not quite in the same wavelength.

As described above, there seemed to be a gap between pre-service teachers and the institute concerning the perception of the role of the liaison teacher. Therefore it was expected that the liaison teachers faced some difficulties in completing their tasks. It means liaison teachers need some training for their own task analysis. Based on the survey,

liaison teachers stated that observation and evaluation was so hard because they did not have sufficient knowledge on the gifted and the giftedness (50%); it was hard to manage and control the students as liaisons (33%); and to facilitate classes (17%). Most of all, it seemed to cause a problematic situation to ask liaison teachers to evaluate the gifted students without taking care of their ignorance of the gifted education. Although the institute provided a short lecture program to introduce the gifted education to the liaison teachers, half of participants responded that they were not given any chance to learn about the theoretical and systematic information of the gifted education.

It is not only the gifted students who benefit from specific programs organized to recognize and cultivate their talents. Teachers working with gifted students can also learn to stimulate creative, artistic, and scientific thinking; they learn to help students understand themselves, develop good self-concepts, and value educational and career accomplishments (Davis and Rimm, 2004). In that manner, teachers of the gifted become better teachers, and their skills benefit regular students as well.

#### Needs and Establishing Model of Pre-service Teacher Program for the Gifted Education

**Needs of Professional Development Program for liaison teachers:** How many liaison teachers are interested in further involvement with the gifted education was investigated as the needs assessment for pre-service teacher programs for the gifted education. About 84% of the liaison teachers responded affirmatively, while 10% of them did not make a decision. Impressively, 93% of the preservice teachers responded that they would apply for a pre-service training program for the gifted education if one is established. Also pre-service teachers documented that if they have systematic knowledge about the gifted education, they would do better jobs as liaison teachers to facilitate class and find students' giftedness through skilled observation (77%):

If I knew more about the gifted education in

terms of systematical theory and knowledge,

I could facilitate the program and find more effectively the potential giftedness of the students.

Most of all, I could understand why my students act unusually and be patient to their unexpected reaction rather than be upset or annoyed. [Subject 22]

Currently the teacher training program for the gifted education solely concentrated on in-service teachers. It was asked if it was needed to have similar programs for pre-service teachers. Eighty four percent of the pre-service teachers agreed to organize such programs. Further, it was proposed that the current liaison program should develop into a pre-service training program with putting more emphases on pre-service teacher education. Ninety percents of the liaison teachers stated that this proposal was a very good plan.

**Comparative Description of the 2003 Liaison Teacher System and a Pre-service Training Program Model:** Conceiving the liaison teacher system as a pre-service training program model would be determined by gazing the gap between the training model and the liaison system. To provide a basis for such determination and to explore the feasibility of its transition, the list of the components of the ICP as a model program was prepared. Then, the common features of the ICP and the liaison teacher system were analyzed and compared as shown in Table 6. The last column of Table 6, also, presented recommended pre-service training program elements. While overall sequences are quite identical between the two programs, it was believed to be a positive feature that the winter intensive workshop for the liaison teachers was served every year. Nevertheless, there has not been any program for the liaison teachers rather than the orientation program for new participants. This result implies that although the current liaison system is generally positive as a teacher training opportunity, it is still

**Table 6.** Comparing the ICP and liaison system with recommended training program found in each sequence

Sequence	Keywords from the ICP	The Current Liaison Teacher System	Recommended Pre-service Training Program
1. Pre-Workshop	Preparation of the workshop Leadership workshop for organizing an instruction team	No Leadership workshop	Formative Assessment of participant pre-service teachers; Leadership Workshop for Instructional Team
2. Workshop	<u>Intensive Workshop Program</u> (partially match) <u>Lectures</u> and discussion Developing modules Micro-teaching	Two-day intensive workshop focusing on introduction of the institutes and how to assess students' activity Lectures on the gifted education(two hour-long)	Three-day intensive workshop programs including overview of the a year long program, lectures on the gifted education program general, Group activity of how to evaluate gifted students by using checklists, and selected videotapes of the gifted education programs. Group discussion with former liaison teachers Choosing group research topic to work on for one semester related to the gifted education and the gifted
3. Trial of Unit	Trying the developed modules	No trial or No teaching	Group discussion on their evaluation of gifted students activities with checklists and comparison with the videotape practices for the first three lessons which they would observe.
4. Academic Year Following	Follow-up study <u>Working in their own classroom</u> (partially match) Reflection and ongoing support and study Seminar or lectures	Assisting and observing the student programs and filling-out the assessment form of student activities No lectures or seminar is open for liaison teacher	Working as liaison teachers with facilitating classroom activities and observing students Taking classes on the gifted education for 3 hours a week. This class consists of lectures on the gifted education and checking with the group research project planned in the workshop. Reflection and ongoing study (These procedures and lectures will be possibly delivered through the internet. And group works can be done in on-line classes.)

\***Highlighted and underlined** item is common or identical keywords between the ICP and Liaison System.

necessary to develop it further into a more intensive teacher preparation program for the gifted education.

This study proposed the model to make transition from the liaison system to a pre-service training program with taking the scaffold of the ICP model and based on reviews of the current training program for the liaison teachers (See Fig. 1). In the proposed model, there are four sequences. The first is leadership conference, which is quite similar to that of the ICP. In this conference, science education faculty and professionals in the gifted education and former participants collaborate for making plans and outlines of the program. In this process, survey results of reflective assessment for the previous program are taken into account.

The next step is three day winter workshop. All

the university faculty members and staff will be involved in lectures, discussions, and practicing sessions. There are three parts composed of the programs: (1) Lectures on the gifted and the gifted education and introduction of the roles of liaison teachers; (2) Review and practicing observation and assessment instruments; (3) Developing teaching modules for the gifted and micro-teaching. In the current system, liaison teachers played roles unrelated to teaching and developing teaching units and learning activity for the gifted. The most important part of the workshop used to be introduction of observation and assessment instruments. In this proposed model, more emphasis was put on liaison teachers' learning and practices to reach a certain acceptable range of inter-rater reliability value by using videotaped gifted classes of the previous



semester. Previously, only lectures and information were delivered to liaison teachers rather than providing them with practices. It resulted in the uselessness of all the observational assessment data by checklists in terms of quantitative research reliability.

The third is liaison teachers' trials in their classrooms with gifted students. During summer or winter intensive programs for the gifted, there are lots of free time after and between the programs. Liaison teachers try their own developed modules with the gifted in such free time. Also other colleague liaison teachers observe, videotaped, and evaluate this tried class. After the class, the liaison teacher and colleague observers gather to discuss and review the class with using the recorded class videotapes. In this way, every liaison teacher has an opportunity to be in class with the gifted and try his/her own modules.

The last sequence is academic year workshop series which occurs during weekend. Weekend seminar for liaison teachers deals with various topics in the gifted education and participants bring about their own experiencing cases. In this sequence, refining modules and reflecting their classrooms continue as well as special lectures of the professionals in the gifted education research. Taking seminars and independent study projects of liaison teachers is required to finish a professional sequence of pre-service training program for the gifted.

### Concluding Remarks

Continuous professional development for teachers of the gifted has been recognized as a pervasive need throughout the world. For increasing the effectiveness of student learning activities, teacher educa-

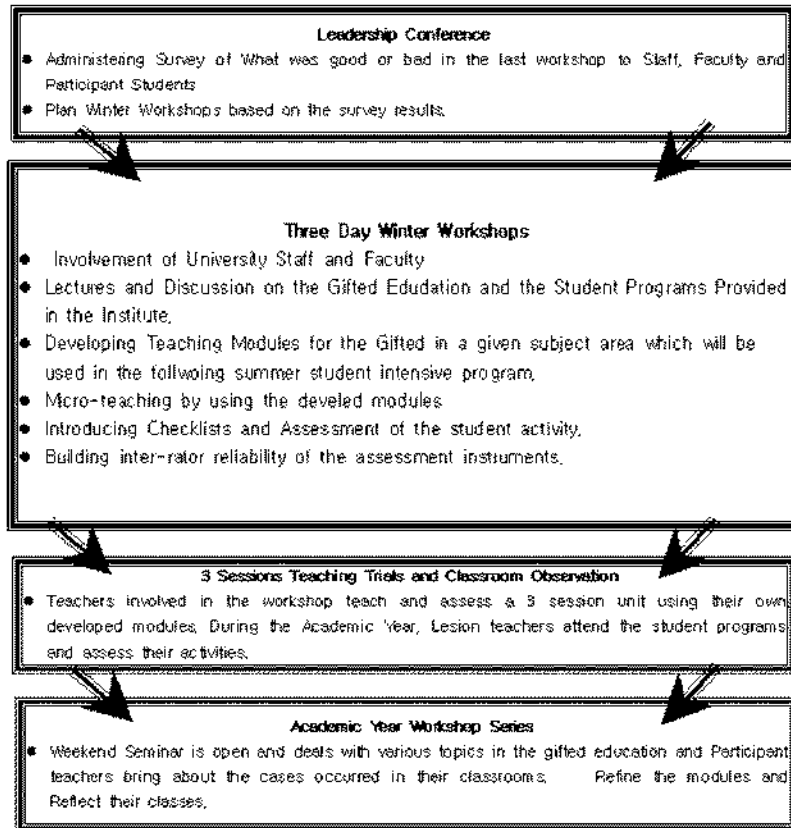


Fig. 1. Proposing Pre-service Teacher Training Program.

tion must be improved (Cross, 1991; Dilworth and Imig, 1994; National Research Council, 2001). As suggested by the finding of this study, appropriate professional development programs should be organized to result in the desired changes in teacher education. However, it was found in some previous studies (Hand and Treagust, 1994; Jofili and Watts, 1996) that a number of teachers were insecure about changing any significant part of their classroom practice. Probably, teachers might not know why they were not comfortable with doing new approaches. This study presumes that most teachers may experience this struggle in the transitional stage when they try new instructional approaches even with new types of students such as gifted students. If there is no help or encouragement, teachers will rather give up any innovative approaches and even more firmly stick to teacher-centered methods. As a way to help them overcome such uneasiness, this study proposes ongoing supports from pre-service to in-service programs especially when the teachers work in actual classrooms.

In the current liaison teacher system, a large number of preservice teachers enter the gifted program course to facilitate them with very little background knowledge of the gifted education and the gifted. Often the pre-service field experience is unhelpful in building confidence in teaching (Henderson, 1992). However, if they find their role-models of teachers of and experience with the gifted throughout the field experience, it will make the transition from the novice teachers to skilled teachers of gifted students a lot easier. Based on the result of this study, it will be more efficient to expand the range of the liaison teacher system in order to include educating pre-service teachers. In this expansion, the program for the liaison teachers should be established with a focus on the systematic knowledge of the gifted in addition to the field experiences of facilitating the gifted program.

Good teachers of the gifted were defined by specific competencies and characteristics (Davis and Rimm, 2003). The efforts of preparing for such

quality teachers may start early in the pre-service program not only by providing pre-service teachers with several lectures but also, more importantly, by having them in the class of the gifted students and their teachers. As Fullan (1995) defined, a staff development model is the sum total of formal and informal learning pursued and experienced by the teacher in a learning environment under conditions of complexity and dynamic change. Considering this, shifting the liaison teacher system into a pre-service teacher training program for the gifted education is a righteous and thoughtful approach to considering the gifted and better programming for them.

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